The American Artisan

THE HARDWARE RECORD

Volume 42.—No. 4. CHICAGO, JULY 27, 1901. $2.00 Per Year.

Trying—to—do—business—without—advertising—is—like—winking—at—a—girl—in—the—dark; you—know—what—you—are doing—but—nobody—else—does.

BRADLEY SHELF BRACKETS.

Strong, Light and All Right.

ATLAS MFG. CO., New Haven, Ct.

Lane Bros. Co.,

POUGHKEEPSIE, N. Y.

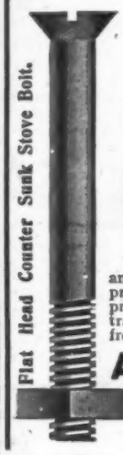
Independent Stove Casters.

Better than a truck, fits any stove without adjustment. No cross arms to interfere when sweeping under stove. For moving or use under stoves on sample floor, blacking room, or warehouse. Enables one man to move a stove. You need this in your business.

Independent Register Co.

158 Champlain St., Cleveland, O.

Our Facilities



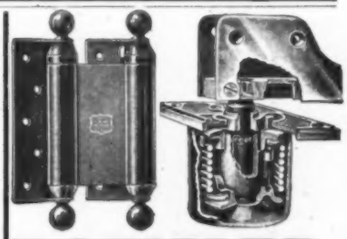
are unsurpassed by any firm in the United States for the manufacture of

Stove Bolts,
Stove Rods,
Machine Screws,
Pointed Pins,
Threaded Wires,
Rivets,
Special Bolts,
Mica Bolts,
Cold Pressed Nuts.

We have a large *clientele* among stove men who appreciate our high quality, prompt deliveries and attractive prices. Let us hear from you.

Atlas Bolt & Screw Co.,

Cleveland, O.



BOMMER SPRING HINGES.

BOMMER BROS. BROOKLYN, N.Y.

FOR AMERICAN SEAL

Elastic Oil Roofing Cement Stove Putty, Asbestos Furnace Cement,

and paints for inside and outside use on any surface.

Wm. Connors Paint Mfg. Co.

WESTERN AGENTS

J. L. PERKINS & CO.,

241 Lake Street, - - - - CHICAGO, ILL.

STOCKHOFF SUPPLY CO., ST. LOUIS, MO.

THIS SPACE FOR SALE

Inquire of Owner,

Daniel Stern, 69 Dearborn St.

CHICAGO.

Black Diamond Files and Rasps.

PERFECT—ALWAYS

Twelve Medals Awarded

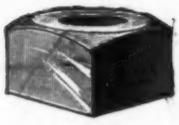
At International Expositions.

G. & H. BARNETT CO.,

Black Diamond File Works. Philadelphia, Pa.

Columbus Bolt Works,

Columbus, O.



Bolts, Nuts, Washers, Turn Buckles,

Bridge and Roof Rods and Bolts

ALL KINDS OF CARRIAGE FORGINGS, ON APPLICATION. CATALOGUE

THE "GLOBE" VENTILATOR,

In Brass, Copper, Galvanized Iron and with Glass Tops for Skylight purposes.

FOR PERFECTLY VENTILATING

Schools, Churches, Halls, Mills, Factories and Audience Rooms of Every Character.

SMOKY CHIMNEYS CURED.

"Globe Ventilated Ridging" Send for Pamphlet.

Manufactured by

GLOBE VENTILATOR CO., TROY, N. Y.

BOILERS AND RADIATORS

A Postal Card from you will bring valuable, complete information in regard to the best, most comprehensive, strictly modern line of these goods.

WRITE US TODAY.
New York, Boston, Philadelphia, St. Louis, Buffalo, Minneapolis, Denver, Detroit, London.

AMERICAN RADIATOR COMPANY

Lake and Dearborn Sts., CHICAGO.

"TABASCO" Water Heaters.

ALL STEEL, SELF-FEED, SHAKING GRATE.

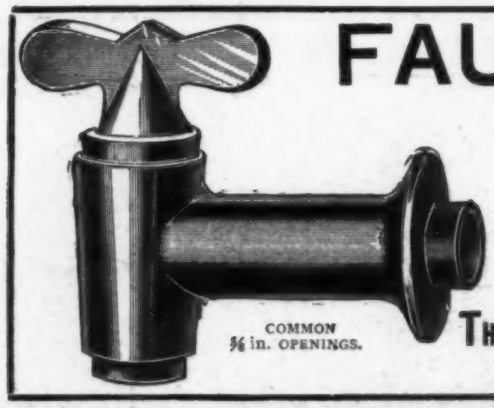
FOR Small Residences, Greenhouses, Flats, Hotels, Baptisteries, Bath Houses, any place a supply of hot water is needed.

SEND FOR CATALOGUE.

Kewanee Boiler Compa'y
Kewanee, Ill.

CHICAGO STORE: 167-169 E. Lake St., CHICAGO.

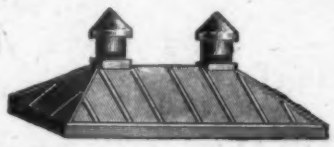
FAUCETS.



COMMON ⅝ in. OPENINGS.

Beer
Milk Can
Oil Can
Cream Separator,
of Various Sizes and Styles.

MF D. BY
THE CLARK NOVELTY CO.
ROCHESTER, N. Y.



"The Illinois"

METALLIC SKYLIGHTS

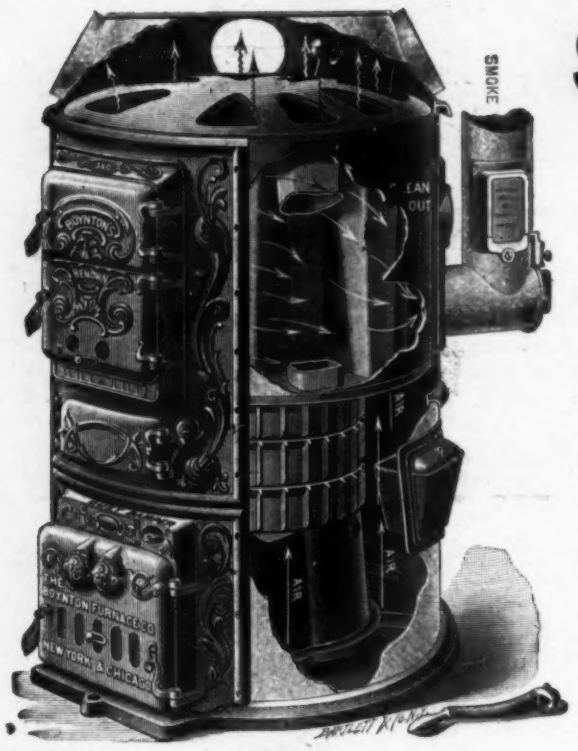
Are known in every State. Have stood the test for years. Are made in 10 styles and 500 sizes. Complete Skylight, Cornice and Finial Catalogue mailed free.

J. H. JONES, Mfr.,
Lock Box 33. STREATOR, ILL

C. C. Arbogast, Monterey, Va., writes: "I beg to take advantage of your kind offer of inserting a free want ad. in your journal. Am a regular subscriber to The American Artisan, and I can tell you, without an iota of flattery, that I find it indispensable."

The making of heating apparatus—

Hot Water Heaters, Steam Heaters and Furnaces,



is our Specialty. In over fifty years of experience we have met with about every phase of the heating problem. The manufacture of economical and durable heating apparatus has been our constant aim, and our success has been fully demonstrated by our long continuance in this line.

REMEMBER, efficiency and durability are the sure tests of cheapness.

Catalogues, Price Lists and Discounts cheerfully furnished the trade.

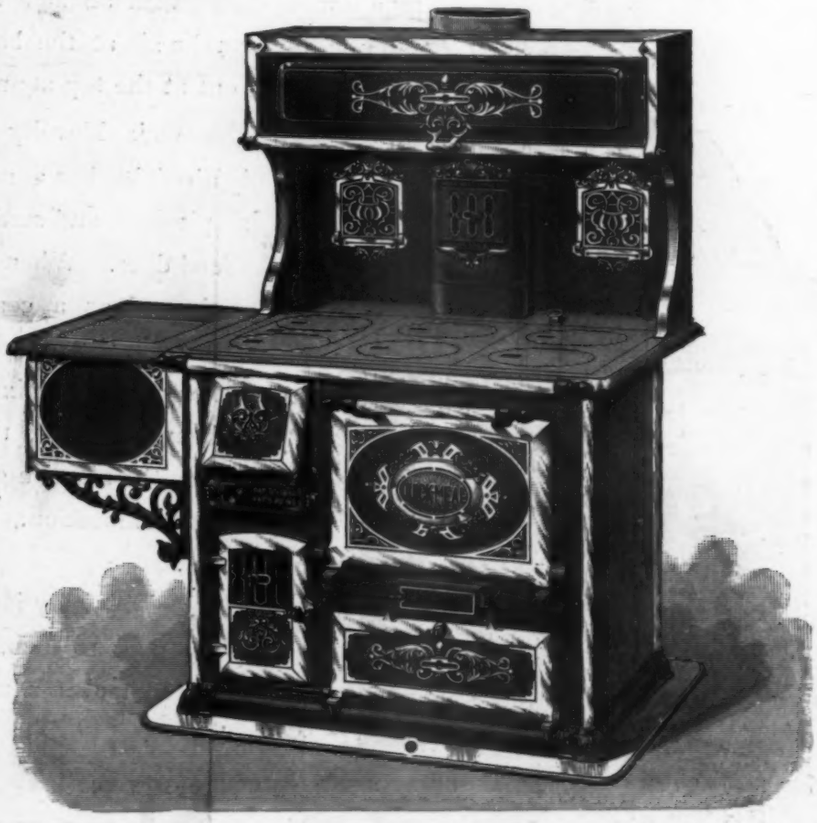
The Boynton Furnace Co.,

New York and Chicago.

QUICK MEAL

Enameled Steel Ranges.

THE RANGE THAT LEADS



Quick Meal Enameled Steel Ranges

Are what the Dealer needs to **add tone to his sample floor.** Their **appearance attracts** the eyes of his customers and invites **investigation. "Quick Meal" Steel Ranges** have so many **special parts of their own** that it is no trouble for the dealer to convince his customers of its **superiority.** They are easy to sell and please the user when sold. That is why so many of the **best dealers sell "Quick Meal" Steel Ranges.**

Now is the time to place your fall orders.

RINGEN STOVE Co. SAINT LOUIS

OAK NOVELTY

A beautiful and original, High Art Twentieth Century Oak. The Nickel is of the finest quality of Novelty Silver.

The Oak Novelty is a Double Heater, having a double casing with an inch air space between, admitting the air at the bottom of casing. It comes out at the top at an intense heat.

The Oak Novelty is mounted strictly air-tight; has a screw draft in the ash pit door, and screw check draft in the feed door. When the Oak Novelty is desired as a coal burner air passes through the register in front of stove into perforated mixer ring around top of heavy fire pot, then out into fire, mixing the air with gases, producing perfect combustion, and great saving in fuel.

The Oak Novelty is made in four sizes:—14 inch, 16 inch, 18 inch and 20 inch, and makes a most beautiful parlor heater.

Abram Cox Stove Co.,

Philadelphia, Pa.

Chas. A. Rusco,

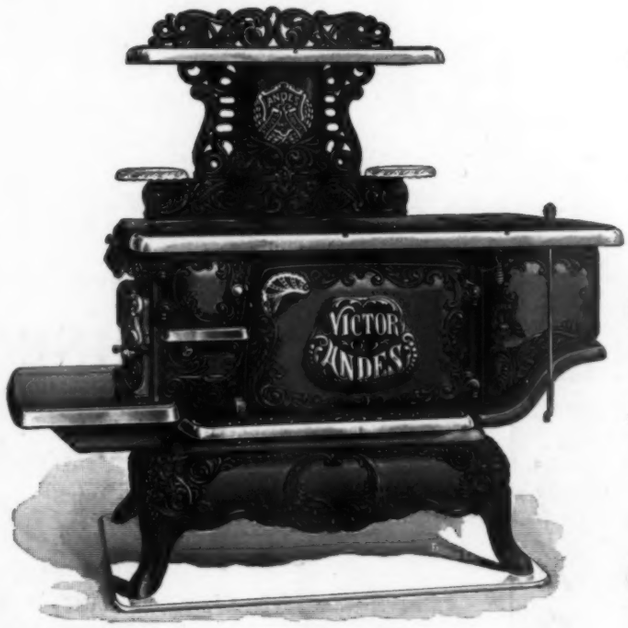
Manager Chicago Branch,

15-17-19 West Lake St.

BRANCHES - - Boston, Buffalo.
FOUNDRIES - - - Lansdale and Philadelphia.

Established 1847.

Victor Andes.



A 4 hole range.

18x18 / 20x20 Oven.

8 and 9 inch tops.

A First Class High Grade Range.

Chaste Design.

The Grate is removable.
Fire Box is Perfect.
Ash Pan is Large.
Swing Hearth.
Large Broiler. Door Opening Flush. Thermometer in Oven Door if Desired.

This Range is fully up to the national reputation of the Andes Stoves and Ranges, which are among the few American Stoves and Ranges which command the enthusiastic approval of both dealers and users.

Write for Catalogue.

Phillips & Clark Stove Co.

GENEVA, N. Y.

Cook & Van Evera Co., 38-40 Lake St., Chicago.

SUNSHINE OAK.

A FULL LINE.

Sizes—14 inch to 22 inch.

High Class and First in its Class.

Just the Thing for School House Heating.

Our descriptive circular and price-list will interest you.

Made at the Sunshine Stove Shop

THE READING STOVE WORKS.

ORR, PAINTER & CO.

Main Office and Foundries: READING, PA.

Western Foundry: DAYTON, OHIO.

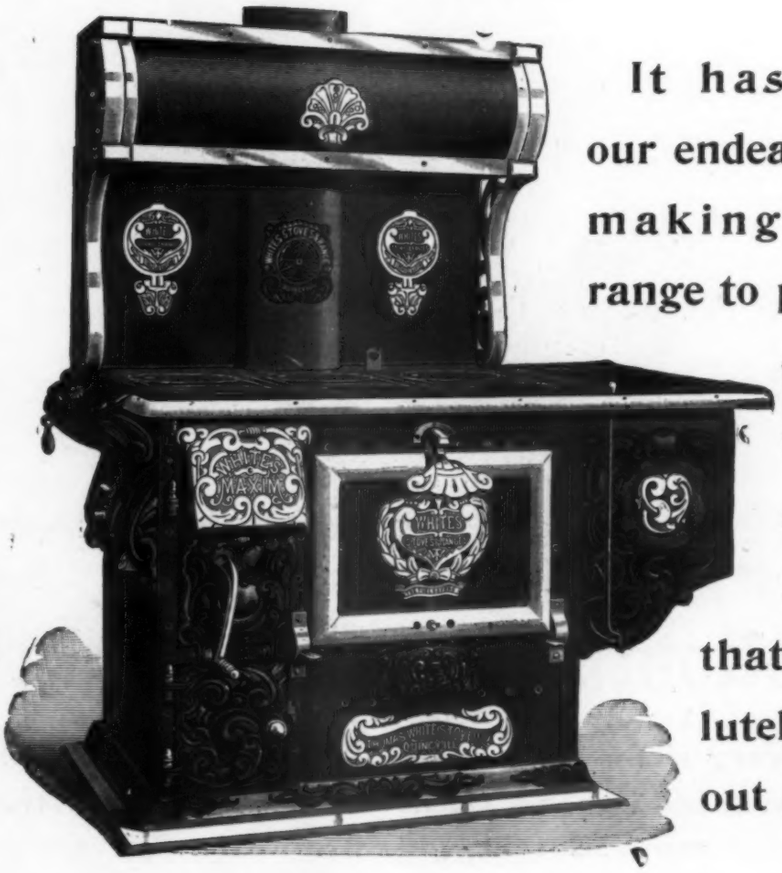
BRANCHES:

153-159 S. Jefferson Street, CHICAGO.
86-90 Canal Street, BOSTON.
64-66 N. 2d Street, PHILADELPHIA.
411 William Street, BUFFALO.

White's Maxim

The Best Steel Range in the World

We stake our reputation as steel range builders on the economy of fuel, quick baking and durability of this range.



It has been our endeavor in making this range to present the trade a steel range that is absolutely without a peer.

WRITE FOR CATALOGUE.

Thomas White Stove Co.

Quincy, Ill.

Moore's Quick Oven Stoves

Bottom Facts—A Straight Tip.

Every oven bottom in MOORE'S STEEL COOK STOVES is guaranteed to be *STRAIGHT* and to keep straight. Our superior method of riveting on the flue strip gives the bottom a backbone, and it can't get away from it.

Compare our way with that used in many of the "just as good" imitations and you will find one of the reasons why the original MOORE'S is the best, and sells the easiest. Some people can be fooled any day, but its *STRAIGHT* goods from the *BOTTOM* up that makes

"THE EASY LINE TO SELL."

JOLIET STOVE WORKS, JOLIET, ILLINOIS.

HOLBROOK, MERRILL & STETSON, San Francisco, Sacramento, Los Angeles.

This is Our "New Standard."

Secure the agency and have a line that is **easy** to **sell.** Good cooking means

Buy a "Standard."

Write for Catalogue and Prices.

Standard Steel Range & Mfg. Co.,
Cleveland, O.

Suburban Homes

Many handsome residences are erected outside the limit of municipal gas service. Every one of these offers an opportunity for the installation of our

Combination Gas Machine and Mixing Regulator.

The service is better than that of the Gas Companies at one-quarter the expense.

Under these conditions you can easily interest almost every householder. Our literature will convince him. Send us his name and we'll do the rest.

The work of installation is yours.

Light better than electricity and cheaper than kerosene is a proposition to conjure business with.

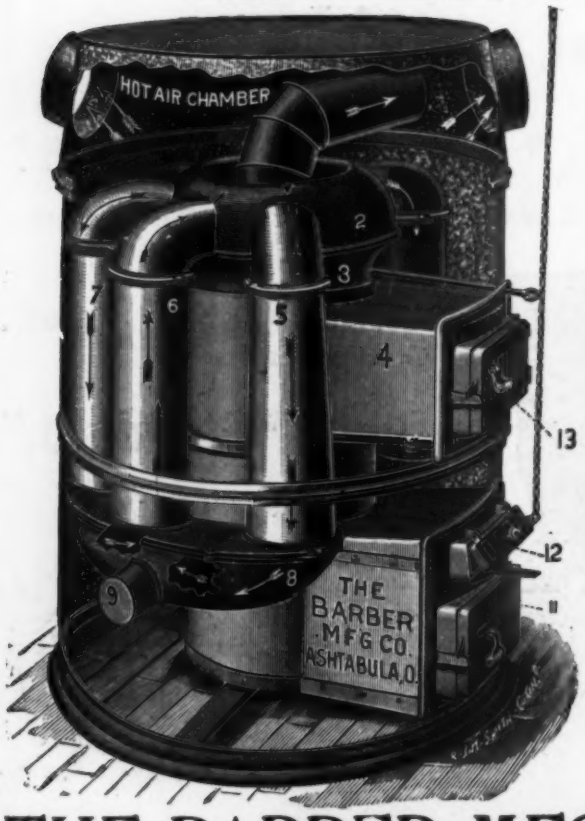
We are lighting more village and suburban stores, public halls, churches and homes than all other manufacturers.

We also make the Bolton Hot Water Heater.

Detroit Heating & Lighting Co.,
DETROIT, MICH.

THE BUCKEYE FURNACE

HAS STOOD TEST OF TIME.



Successfully Sold For Last 10 Years.

Their peculiar construction adapts them to low as well as high cellars.

Only one Furnace from numerous family of

Furnaces Made

by us. Uses single or double patent

Draw Center or Duplex Grate.

Our patent Radiator gives one-half more radiation than other Furnaces; hence more economical in fuel.

Has Hot Water Attachment.
Has Natural Gas Burner Attachment.

Burns all kinds of fuel. Especially adapted to

HARD COAL, COKE and GAS.

For details and terms inquire of the manufacturers,

THE BARBER MFG. CO., Ashtabula, Ohio.

Why

don't you, Mr. Dealer, handle a line of steel ranges which have proven themselves to be great money makers? Such a line is found in the

Reliable Steel Ranges.

These ranges are thoroughly up-to-date. They are 365 days in advance of all others and possess special features which no other ranges have.

They are built on honor, built to last, and are "Reliable" in every sense of the word.

Write for catalogue.

The Schneider & Trenkamp Co.,

Cleveland.
Chicago.

Model Radiator

For Hard or Soft Coal.

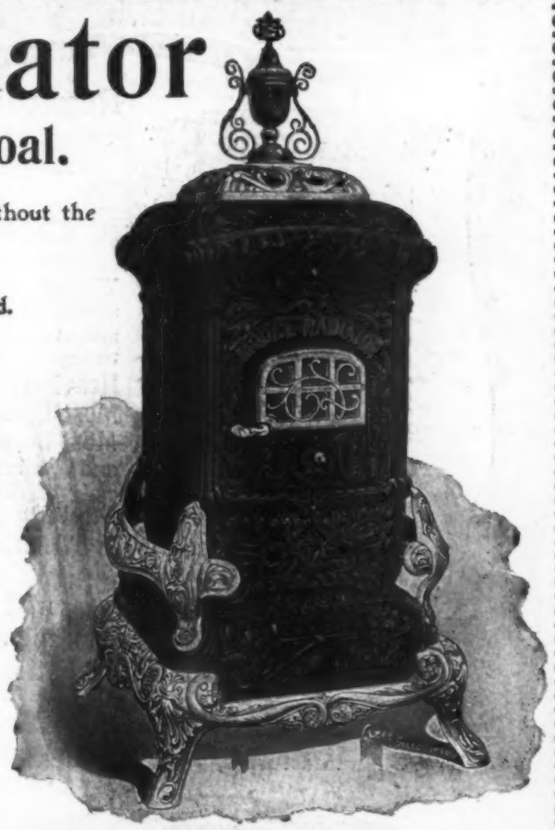
Made in four sizes, Nos. 12, 14, 16 and 18.
Every stove a single or double heater complete, without the use of extra parts.
Large heating surface—Equal to that of an Oak.
Best and simplest reversible pipe collar.
Very substantial outer casing, which is easily removed.
Joints ground and cemented.
All doors fitted Air-Tight.
Our patented Air-Tight draft register in Ash Pit door.
In this stove we use our new patented method of holding the sheets of mica. They will not get out of place or smoke up.
Handsome Nickel Ornamentation.
A postal card will bring you more information.

The Portsmouth Stove & Range Co.

Portsmouth, O.

MORLEY BROS.,
Saginaw, Mich.

Agents for Michigan and the Northwest.



MODEL RADIATOR.

Monarch Cinderella

For Hard Coal.

In the Monarch Cinderella will be found one of the most perfect, high grade, medium priced, base burning, double heaters, offered to the trade.

Every modern and desirable improvement is embodied in its construction. We believe the careful buyer will acknowledge that there is not a better stove in its class.

Every point has been studied to make it the best; and for ingenious, effective simplicity in construction, it stands without a peer.

Best Workmanship. Best Materials.
Silver Nickel.

We would be pleased to send our catalogue.

Pittsburg Stove and Range Co.

Pittsburg, Pa.

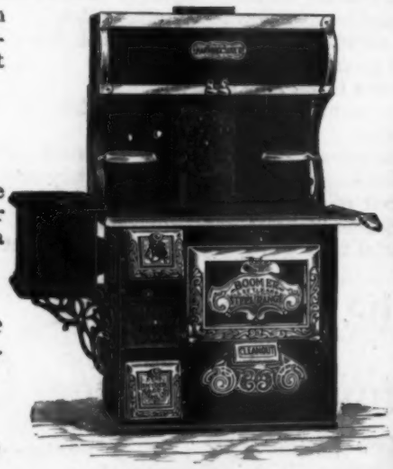
Western Sales Agent, W. D. Sager, 38 and 40 Michigan St., Chicago, Ill.

Boomer Furnace.

Regarding

Boomer Furnaces Or Boomer Steel Ranges

We want to state in strongest terms possible that if you want the **Heaviest, Most Durable, Most Economical** and easiest to take care of Furnace or Steel Range, buy a **BOOMER.**



Boomer Steel Range.

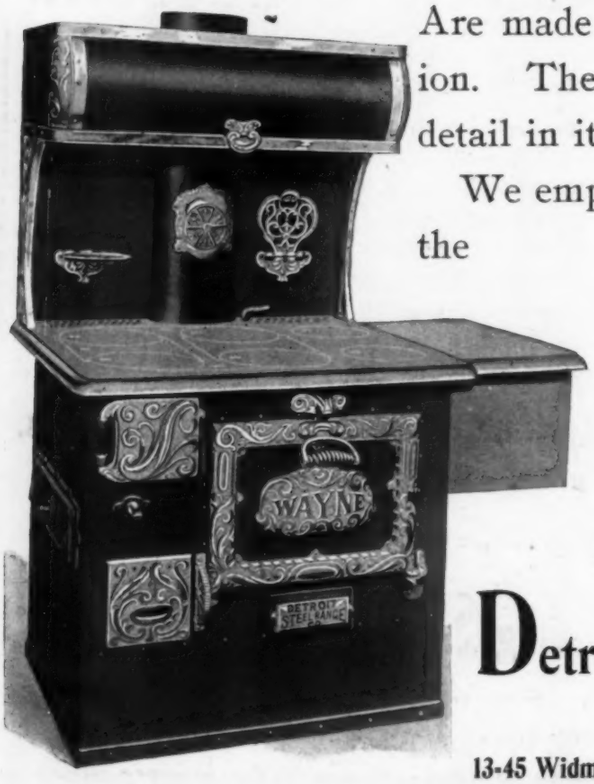
Neither time nor money is spared to make them the best. Buy Boomers and save your coal bills. We invite investigation.

Hess, Snyder & Co.,

Manufacturers, MASSILLON, O.

Border Copyright '96

Our Steel Ranges and Stoves



Are made under our personal supervision. The management attends to each detail in its several branches.

We employ in the making of our goods the

Best Material

Best Mechanics

Best Supervision

That money can procure.

Detroit Steel Range Co.

Factory and Show Room:

13-45 Widman Place, DETROIT, MICH.

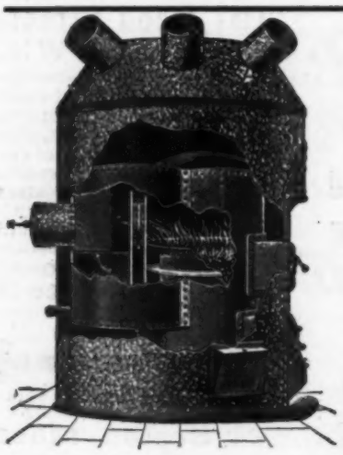
STAR STOVES AND RANGES
ENTERPRISE STOVE CO. VINCENNES, IND.
GUARANTEED

CATALOGUE SHOWING

Gas Ranges — Cast Cooks
Steel Ranges — Cast and
Cast Ranges — Steel Heaters
Steel Cooks — Hot Plates

WILL BE FURNISHED FOR THE ASKING BY

Enterprise Stove Co.
VINCENNES, IND.


Weir Furnace.

Weir ALL STEEL GAS AND SOOT CONSUMING **Furnace.**

The Heaviest Steel Furnace Made.

Absolutely gas and dust tight.
A great heat producer, but a fuel saver.

MADE IN TWELVE SIZES.

"The Handy Furnace Pipe"

The saving of labor in putting it up really makes it the cheapest hot air pipe on the market.

Is Absolutely Safe.

Handy Pipe.

Manufactured by

Meyer Furnace Co.

Send for Catalogue. PEORIA, ILL.

Many a Dealer Has Gone to the Wall

Trying to handle goods that are only made for a few—the "so-called high grade" kind. . . . . .

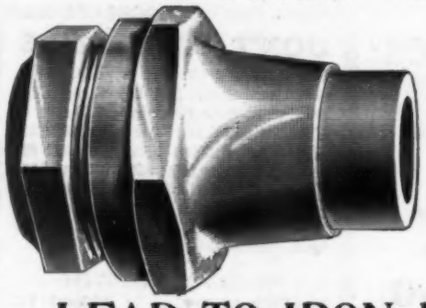
Willard Steel Ranges "ARE AS GOOD AS THE BEST."

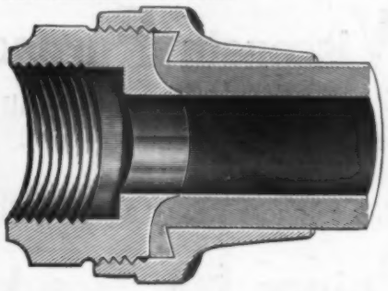
Made to meet the demand of the masses. If you are not already selling them, write and see if you can't secure the agency. Want one dealer in every town in the U. S.

WM. G. WILLARD, Manufacturer,

619 and 621 N. 4th St. ST. LOUIS, MO.

Patented May 28th, 1901. See Advertisement in Next Issue.





Novelty Couplings

Lead to Lead and Lead to Iron or Copper.

LEAD TO IRON PIPE. A Perfect Substitute for Wiped Joints.

Water Back, Faucet, Boiler Couplings, Etc.

SEND FOR COMPLETE CATALOGUE

The New Haven Novelty Machine Co., New Haven, Conn., U. S. A.

44 Years' Experience

IS EMBODIED IN

Mueller Furnaces.

ANY WONDER THEY ARE THE MOST SATISFACTORY?

Made in all sizes for all kinds of fuel. Write for 1901 catalogue and prices. Get our SPECIAL REGISTER OFFER.

L. J. Mueller Furnace Co., 191 Reed Street, Milwaukee, Wis.

BRAND STOVE CO.

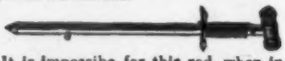
We make largest line of cooking and heating apparatus, cast cooks, cast ranges, steel cooks, steel ranges, hotel outfits, heating stoves, furnaces, hot water and steam heaters. Send for catalogs.

MILWAUKEE, WIS.

The YANKEE Hot Air DAMPER (Improved) All Steel.

Above All, Cheapness—a dealer cannot possibly make dampers as cheaply as we sell the Yankee. Easily put in and taken out of pipes. Stiffest, quickest working and neatest damper on the market.

ROD POINTS: Has wood enameled handle. Wood handle cannot come off. Washer and spring cannot fall off the rod. Same size of holes are punched on each side of pipe. Rod is made of ⅜-inch cold-rolled steel and slips into damper very smoothly. **Sample sent to any dealer without charge.**



It is impossibe for this rod, when in position, to move either way.

The S. M. HOWES CO., Manufacturers, 40-46 Union St., **Boston, Mass.**

NEW YORK: A. L. Canfield, 248-286 Pearl St. CHICAGO: Excelsior Steel Furnace Co.

Sizes: 6, 7, 8, 8½, 9, 10, 10½, 11, 12, 12½, 14, and 15.

Emperor Furnaces

For Wood

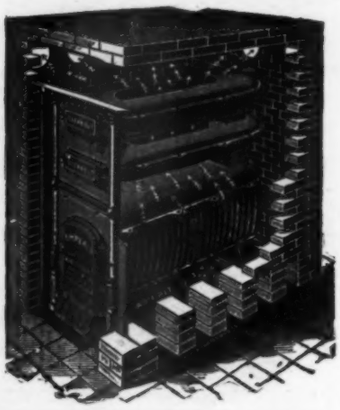
Simple. Safe. Durable.

The Best and Cheapest Line of Wood Furnaces.

Furnished for Either Brick or Galvanized Iron Casing. Send for Catalogue.

Bergstrom Bros. Co.

Neenah, Wis.



Wisconsin Furnaces

are dependable. They have all the up-to-date improvements and the prices are right.

Let us quote you on a salable line.

Phipps Furnace Co.

135 ONEIDA ST., MILWAUKEE, WIS.

DON'T READ THIS

Unless you are interested in down-to-the-minute advertising. Have had over 15 years' practical advertising experience with some of Chicago's most successful Manufacturers, Jobbers and Retailers. Am at present engaged with a very large advertiser, but have time to spare and will do a limited amount of work for any one who desires first-class ADVERTISING SERVICE at very reasonable rates. Write for further Particulars.

FRANK. E. RUBOVITS,
233 Fifth Avenue, - - Chicago, Ill.

EDWARD BAUMAN, LIBERTYVILLE, ILL., WRITES: "Discontinue my advertisement in THE AMERICAN ARTISAN, for I have so many letters that it keeps me busy to answer them all."

JEWEL STOVES AND RANGES..

JEWEL STOVES AND RANGES
LARGEST STOVE PLANT IN THE WORLD

A Complete, Well Advertised Line;
Low Prices and Good Workmanship.
Please Write for Catalogue.
DETROIT STOVE WORKS.
Detroit - Chicago.

Royal Heaters.

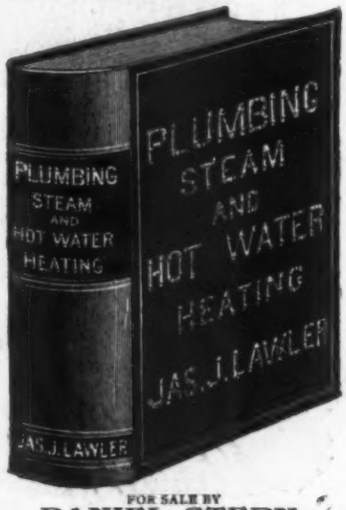
MANUFACTURED BY THE
HART & CROUSE CO.
UTICA, N.Y.

ALL THE LEADING LINES OF
STEAM, HOT WATER & HOT AIR,
FOR HEATING ALL CLASSES OF BUILDING.

235 WATER ST. N.Y. BRANCHES. 79 LAKE ST. CHICAGO.
COLUMBUS, O. ST. LOUIS.

Modern Sanitary Plumbing & Steam and Hot Water Heating

An Encyclopedia of Practical Plumbing. By JAMES J. LAWLER. 400 pages, large octavo. Size 8x9 inches. Price $5.00.



FOR SALE BY
DANIEL STERN,
69 Dearborn Street. CHICAGO.

The Hero Furnaces

are the best for a cold climate.

Our water attachments can be used in any furnace.

Can furnish repairs for any furnace.

Western Agents for Colebrook's Asbestos Furnace Cement and Paper, Stove Putty and Other Leading Specialties.

The Chas. Smith Co.

122 Lake St., Chicago.

CALL A SPADE

a Spade

And call the House Warming Manual the latest and most up-to-date heating-book published.

It contains *The American Artisan* $300 Prize Competition Essays.

For sale by all booksellers at $3.50 per copy, or by the publisher,

DANIEL STERN
69 Dearborn St.
CHICAGO

Carlton Hdw. Co., Calumet, Mich., write } **"Please discontinue ad. in The American Artisan for salesman wanted. We have had bushels of applicants."**

Apply All The Tests

to **Schill's Furnaces and Ranges,** and they will fill the bill every time. Whether the test be durability or economy of fuel, satisfaction to the user or salability. They never fail to meet every requirement.

Write for Catalogue and Prices.

The Schill Bros. Co.,

CRESTLINE, O.

Monarch Furnace

IS ALL CAST IRON
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No "steel" or sheet iron parts to rust out or warp, or JOINTS of a combination of CAST IRON and SHEET METAL to OPEN and allow the ESCAPE OF GAS, SMOKE OR DUST INTO THE AIR CHAMBER.

Do not take our word for it; order a sample furnace, set it up in your shop or store and judge for yourself. If it is not as represented send it back at our expense. As we have almost no expenses in the way of traveling or advertising, we are able to sell the furnaces at a light profit, depending on merit and price to get trade and hold it.

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Utilized radiating surface, **that is economy.** Sectional fire pots from 1 in. to 2 in. thick and other parts in proportion, **that is durability.** Positive gas-tight joints, **that is necessary to health.** These, with all other improvements **for ease of management,** are combined in the Gilt Edge Furnaces. They are made for all kinds of fuel, and are the very best. Write for catalogue and prices to

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The Tinsmiths' Pattern Manual

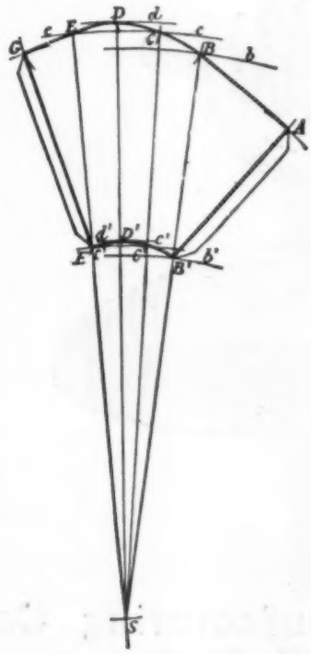
Is recognized as a standard authority on sheet metal work. A new revised and up-to-date edition of 248 pages, 8 x 5, containing over 100 illustrations, has been issued. A page from this book is shown herewith.

208 THE TINSMITHS' PATTERN MANUAL.

or S' *c* (which is equal to S E) and S' B successively as radii describe arcs cutting S' *d* in *e* and *f*. Draw *e* C, *f* F perpendicular to X X and cutting it in C and F; also join C S, F S, cutting O'' D' in C' and F'.

Next draw S D (Fig. 79) equal to S D (Fig. 78), and with S as centre and S C, S F (Fig. 78) successively as radii

Fig. 79.



describe arcs *c* and *b*. With D as centre and radius equal to *d* E (Fig. 78) describe arcs cutting arc *c c* in E and C. With C as centre and radius *c* B (Fig. 78) describe an arc

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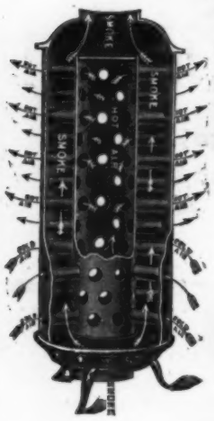

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IN THE

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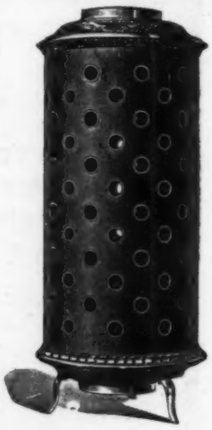
and you will comprehend the great radiating surface directly over the hot current where one square inch is better than six at the side.



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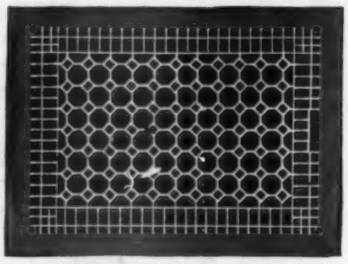

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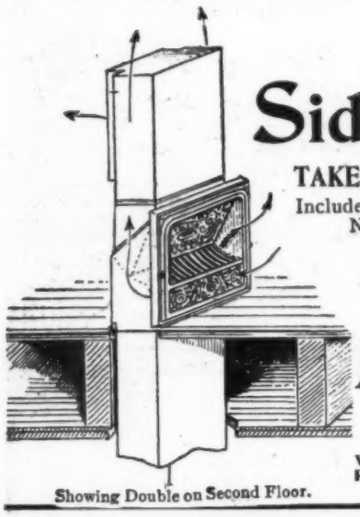

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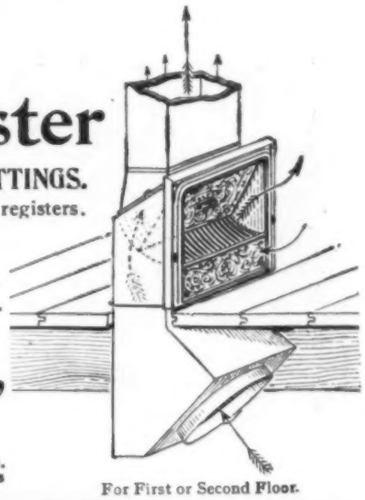

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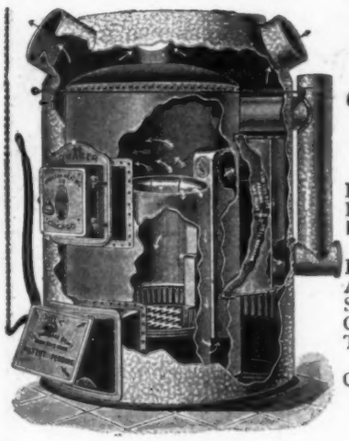

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30

HB CHICAGO

CURTIS CANDY CHICAGO 1901

ESTABLISHED 1880

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

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DANIEL STERN, President American Artisan Press,
69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.

This Paper is a Member of the Chicago Trade Press Association.

CHICAGO, JULY 27 1901.

WHILE the Chinese population in this country is showing a steady decrease, the Japanese element is decidedly increasing. In 1900 there were only 89,800 Chinese in this country as compared with 107,475 in 1890. In 1890 there were only 2,039 Japanese here, and in 1900 there were 24,300. The growth of the Japanese element in Hawaii was also far greater than that of the Chinese.

EXPORTS of manufactures from the United States appear to be slightly less in the fiscal year just ended than in the preceding year, the figures for the 11 months ending with May, showing an apparent reduction of $14,565,030. This statement, however, is misleading because the figures of the year 1901 do not include the exports to Porto Rico and Hawaii, which were included in former years, and which are largely manufactures and which will aggregate $25,000,000 for the fiscal year.

THE modern inventor, taken in the aggregate, is far from being gallant. Devices for helping the overburdened housewife are few and far between. The progress in improved farm tools for the use of our bucolic brother and in appliances for his wife is as that of the locomotive and the snail. An original suggestion in this connection comes from a man named Frost, of Wisconsin, a man in public life, by the way, perhaps mindful of the adage that the hand that rocks the cradle rules the world, seeking thereby to become popular with the women as the surest way to secure the votes of the men. He believes that rural laundries, established in small hamlets and at country four corners, gathering up the washing from all the region around, doing it, as well as the ironing, at reasonable rates, would make the life of the farmer's wife more endurable and more attractive. His idea is to be put into practical operation, and if it succeeds it will prove popular in all the agricultural regions.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

DID you ever go to a show with your best girl and have to stand up in the rear during the performance? You may have enjoyed the play witnessed in this fashion, but the chances are you would have liked it better if provided with a comfortable seat.

The managers of the theater are not to be accused of favoritism in this matter. It makes no difference to them whether John Smith has a comfortable orchestra seat, while you, like Zekl, are alternately standing on either foot, or *vice versa*. It is all a question of first come, first served. The forehanded people who go around the day before and buy their tickets get reserved seats. Those who wait until the last minute before procuring seats have to treat themselves to Tannhauser or Lover's Lane standing.

During the past few weeks there has been a fierce demand for gasolene stoves and refrigerators. Experienced jobbers and retailers declare that they never saw these goods sell so fast before. Frantic retailers have coaxed, threatened and implored jobbers to supply them with the cheaper grades of gasolene stoves. Every jobber has received numerous rush orders for refrigerators. These seasonable goods are scarce, the demand being heavier than the supply, and business is very good, as everybody wants goods at once.

The study of the past and present is only valuable as furnishing a guide for future conduct. The dealer who figures up how much he would have made if his jobber had been able to supply him with all the refrigerators he desired, and then complains because he was born on a Friday the 13th day of a month, and never had any luck, is not learning anything in the hard school of experience. This fall there will, in all probability, be a strong demand for Oaks and Hot Blasts, steel cooks and cast cooks. Many dealers are very likely to be caught in the "standing room" bunch if they do not order their goods now, thus preparing themselves for a season of brisk consumption of stoves.

* * *

A DAILY newspaper man, following the musing organist of Lowell, built a bridge from dreamland for his lay the other day, and to enhance the gaiety of nations concocted a fierce yarn about the Peninsular Stove Co., of Detroit, Mich., the Reading Stove Works, Reading, Pa., and the Colby Stove Co., New York. As is not always the case, this reportorial fantasy was of a strictly harmless character, as can be seen from the following excerpts:

"Three American stove manufacturers are going into the business of making stoves for the Chinese. In order to compete in this market it is necessary that the stoves be made after the Celestials' own pattern. For the past year these manufacturers have been trying to get a sample stove from China to be used as a model for the stoves to be made for this trade. After many months

of effort a small model of a Chinese stove carved out of wood and used in the Celestial kingdom as a plaything has been secured. From this will be made working models of the Chinese stoves.

"The Peninsular Stove Co., of Detroit, the Reading Stove Co., of Reading, Pa., and the Colby Stove Co., of New York, are the manufacturers who intend to make the Chinese stoves. For many years American stove firms have been trying to introduce their goods on the Chinese markets. Their efforts have been practically fruitless, however. To the Oriental mind the American stove looks no more like a stove than anything else one could imagine. It is next to impossible to make a native of China believe that the American stove is a stove. An enterprising agent can sell the native a stove under representations that it is a new fangled gocart or an ice chest, but a stove—no; the Chinaman will not, cannot, believe that that queer shaped cast iron thing is intended for the consumption of coal and the utilization of heat.

"Consequently it has been found necessary to imitate the Chinese stoves in order to sell them to the Chinese. The model secured greatly resembles the old-fashioned barrel shaped stove, which can be seen today in the village store. It has no stove pipe and no doors, however. This crude affair will be imitated by American stovemakers and sold to the Chinese.

"The top of the Chinese stove is large enough to permit of cooking. A round hole in this plate is the only chimney which the stove can boast. The nature of the fuel used is such that there is no smoke, but the noxious gases escape into the room. The Chinese stove in operation is a dangerous piece of mechanism. One of them was the cause of the death of Col. York, of the Germany army, during the recent operations of the allied forces. He was smothered to death by the gas which escaped from a stove in his room."

While two of the firms mentioned advise us that their only knowledge of this affair is derived from a perusal of the newspapers, this airy phantasy may in time assume tangibility, and some of our enterprising stove makers may in time make a variety of special stoves to suit the queer prejudices of Martinique and Manchuria; Madagascar and Matabeleland.

* * *

William Wilson, of Geneva, N. Y., is a man of rare activity. On getting up in the morning he goes out to inspect his young peach trees in the capacity of Nurseryman Wilson. Later on in the day he superintends the installation of a range boiler in his capacity of Plumber Wilson. After lunch we see him writing for advertisements for the Hardware Quarterly in the guise of Editor Wilson, and, as the sun sinks behind the horizon, Hardware Dealer Wilson can be seen consummating a refrigerator sale in his hardware store.

The Hardware Quarterly, as issued by Editor Wilson, can give The American Artisan and other hardware journals cards and spades and beat them by any number of lengths when it comes to percentage of profit in each issue.

Editor Wilson publishes no news, no editorials, no write ups, no technical articles, no convention reports, no patent reports, no market reports, not even an index. His eight-page organ, devoted to the interests of William Wilson contains advertisements exclusively. By some trick of legerdemain this 14x11 inch sheet of hardware advertising is sent out as a personal letter. The manufacturers desirous of helping Editor Wilson pay $20.00 for a quarter page for four issues, $12.00 for an eighth page for four issues and $7 for 1-12 page for four issues; rather stiff rates for a space in an ordinary appearing circular which will be mailed to people whose names are on Editor Wilson's "subscription" list.

To call a spade a spade, Mr. Wilson by this little device of a quarterly virtually secures an extra discount from the manufacturers who take space in his little "paper." It is to Mr. Wilson's advantage to issue this little circular advertising his hardware store, particularly as he transfers the expense and a profit besides to the patient shoulders of the manufacturers who advertize with him. What is sauce for the goose is sauce for the gander, and the manufacturers who yield to William Wilson's, Geneva, N. Y., little scheme are not in a position to emphatically say "no" when Jabez Bruce, of Elmira, N. Y., Lyman Simms, of Wilkesbarre, Pa., and Herman Teufel, of Quinnebaug, Conn., start up "Hardware Quarterlies," which innocent ruse will enable them to secure a larger discount from the manufacturer than their straightforward competitors.

Another abuse which was quite flagrant eight or ten years ago, but which is rapidly dying out, was the reprehensible practice of jobbers in forcing manufacturers to pay anywhere from $25 to $100 a page for an "advertisement" in their catalogue. The manufacturer was not allowed to write his "advertisement," which consisted only in a cut of his goods and the price, not even his firm name and address being allowed to appear.

It is the class of manufacturers who are accustomed to spend their advertising appropriation for placing goods before the trade in placating these extortionate jobbers and who reach the public by allowing a crew of William Wilsons to genteely milk them for as much as they will stand, who refuse with adamantine firmness to patronize profitable advertising mediums, both trade and public, on the ground that advertising don't pay.

It is a wonder how much expenditure is saddled on long-suffering advertising appropriations anyhow. I know of a prominent hardware manufacturer who spent some $8,500 in yachting last summer, and as his name as the president of the Anderson & Peterson Monkey Wrench Co. was in the papers quite often, he charged the whole item up to "advertising." When a trade paper man came around to solicit a contract he said: "I must cut down my advertising appropriation. Last year I spent $12,000 in advertising, and I didn't get more than half of it back." This year this man will probably charge his tailor's bill up to his advertising account and grumble because the thousand or two he spends in legitimate advertising cannot stand this excessive and unjust handicap.

News Siftings.

W. M. Shaddinger, who is very widely and favorably known to the western stove trade, has accepted a position with the Brand Stove Co., Milwaukee, Wis.

The Buckeye Foundry Co., South St. Paul, Minn., will shortly erect a new foundry in that city in which they will make a full line of stove castings and repairs.

Otto Agricola is president and E. S. Jones, C. P. Smith and T. G. Ewing are the directors of the A. & J. Manufacturing Co., Gadsden, Ala., recently incorporated for the manufacture of stoves.

It is stated that efforts are being made to effect a consolidation of malleable iron manufacturing concerns. The idea is to have one corporation with a board of directors composed of the presidents and general managers of the largest underlying companies.

The City Stove Repair Co., 108 Prospect street, Cleveland, O., carry a very complete stock of stove and furnace repairs. They carry a stock of 150 tons castings, embracing over 3,500 different makes of stoves, ranges and furnaces. All this firm's repairs are guaranteed to fit.

The old story about the lanky Texan who came up to New York and called on the promoter of the rubber trust to sell him a rubber plant he had had on his back piazza in Dallas for 17 years, is called to mind by the postal circular sent out by the Peninsular Stove Co., Detroit, Chicago and Buffalo, which shows two "giant plants." One is a cactus about seven times as tall as a human being, and the other is their large and finely equipped steel range plant. Each year this firm enlarges their facilities and gives their patrons new specialties. Their immense warehouses enable them to carry a large stock and make prompt shipments.

The Bering-Cortes Hardware Co., Houston, Tex., in a recent favor have this to say about the depredations of steel range peddlers in that section of the country: "The steel range peddlers have not been operating in this section for a number of years, and we doubt if they could make any sales after the method they pursued some years ago, in almost forcing the ranges on people, who were unable to buy as high a price an article (high in price only). The majority of these ranges that were sold did not give satisfaction, and were thrown aside in some cases before the notes given fell due. We notice in some counties in our state these peddlers are taxed $250 in each county, which we think is the most effective means of doing away with these peddlers."

The Brand Stove Co., Milwaukee, Wis., send us a little circular calling attention to Brand's gas ranges. These ranges are constructed of sheet steel. All piping is elegantly nickel plated. The burners are operated by brass nickel plated valves, producing steady blue flames and affording accurate control of gas flow into the air chamber. The air supply is effectually regulated by means of a brass regulating mixer, furnished with each burner, thus enabling the user to maintain proper balances between air and gas pressure. These ranges are asbestos lined throughout. A unique flue arrangement accomplishes the even distribution of heat in the oven. The oven and broiler heat are secured through large pipe burners. The ranges have cast iron shelf at either side. The large cast iron broilers have extra drip pans. The burner tops are removable, facilitating cleaning. A movable dripping receiver amply protects the oven top from rust or corrosion. Brand's hot plates are made of cast iron. The gas cocks and all piping are nickel plated, while the legs are japanned and detachable.

The Pittsburgh Stove & Range Co., Pittsburg, Pa., send us a circular calling attention to their Cinderella Special steel range, for hard or soft coal or wood. The outside construction of this range is the best polished, annealed and patent leveled blued steel, 18 gauge. The inside is of the best full cold rolled patent leveled and annealed range steel, 14 gauge. All parts exposed to the direct action of the fire are of double thickness, with an asbestos mill board between. The ovens are made of 14 gauge wrought steel and are extra large and high. The top oven plate is fully protected from the action of the fire. The bottom oven plate is supplied with cast iron braces to prevent buckling. All sizes of flues and dampers are of the sheet flue construction. The flue box is made of heavy pressed steel, reinforced to insure the greatest durability. The direct draft damper, operated from the top, insures a quick fire. The nickeled parts include edge band, oven door frame and handle, oven door panel and name plate. One of these circulars will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

The Sheridan Stove Mfg. Co., Quincy, Ill., send us their latest catalogue showing their line of "S" stoves and ranges. Their Select range, with four holes for wood, is neat in design, economical in fuel and has porcupine fire back. Their Steel Select steel cook, for wood, has end feed for wood or coal, front swing lower door, cast back flue, duplex grate, large bailed ash pan, double bottom, asbestos lined, double bodies made of polished steel, and spring balanced oven door. Their Smokeless Oak, with drop feed door for coal, is an entirely new construction in the way of an Oak. The feed door drops exactly like a range feed door and has flanges on either side wide enough to prevent any coal or dust being spilled on the floor or carpet. Beneath the feed door is a check damper, directly over the fire. The Substitute Oak, for coal, is a modern and handsome Oak stove at a low price. It has a large feed door, heavy polished steel body, cam draft dampers, cone center grate and large ash pit. The nickel trimmings consist of three foot rails, top ring, urn and keys. The Supreme Hot Blast is mounted with 18 gauge polished steel. It is highly decorated and is full nickel trimmed. One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

The Galusha Stove Co., Rochester, N. Y., send us their interesting catalogue of Norman stoves and ranges. The Norman range is brand new from top to bottom. Its design is bold, artistic and full of character. The

reservoir has a very large capacity. The grate is removable without any disturbance to the fire box linings. In the fire box construction arrangements have been made for an easy change from coal to wood. Other features are the large oval fire box, round cornered Dockash grate, extra large ash pan, main bottom cemented, oven top cemented, nickel band on range top, nickel band on shelf top and no bolts used in fastening the oven shelf. The Norman Prince four-hole range, has a fire box so constructed that when wood is to be burned the Dockash grate can be removed and a slide wood grate slipped in to replace it. This range has a large oval fire box, round cornered Dockash grate, main bottom cemented, nickel band on range top, ventilated oven, draw-out grate, etc. The Bright Norman, a medium priced four-hole range, has an extra large fire box for coal or wood, large ash pan, large reservoir, either copper or enameled iron, ventilated oven, nickel trimming, cemented oven top and duplex or Dockash grate. One of these catalogues will be furnished the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

THE WORLD DO MOVE.

TO THE AMERICAN ARTISAN.

We beg to acknowledge receipt of the number of your most excellent paper dated July 13, and have read with interest the letters that have been written to you by the numerous merchants and manufacturers throughout the country, and are glad to see that every one seems to believe that his part of the prosperity will come this fall, and we hope the great drought now playing havoc with a large part of the best section, may soon be over and that all may run their factories to their fullest extent.

"The world do move after all." The writer could hardly help smiling when comparing this issue of your paper with the report of the Stove Association, published in your paper *less than five years ago,* where the majority of the stove manufacturers decided at that meeting that steel ranges were a "fad," and would soon be unheard of. This leads us to believe that when an article of actual merit once comes before the people of the United States, no amount of men or money can keep it from finding its wav on the market.

MAJESTIC MFG. CO.

St. Louis, Mo., July 15, 1901.

RED CROSS STOVES AND RANGES.

The Co-operative Foundry Co., Rochester, N. Y., for whom J. P. Lindemann & Sons, Milwaukee, are western agents, send us a copy of their 35th annual catalogue of Red Cross stoves and ranges. The Red Cross Victor new steel range is built of planished steel with double plates interlined with asbestos. There is a plunge damper in the top and combination wheel register and damper in the pipe. The grates are duplex or Dockash, and draw out in front instead of longitudinally. The oven door has a thermometrical indicator. The ash pan is very large and very deep. The feed door combines the swing and pouch feed principles. The extreme bottom or cast iron base section is an exceptionally desirable feature.

The Imperial Red Cross range has a flue construction which combines the desirable elements of the sheet flue and two-flue ranges, besides the draw-out oven rack.

The Royal Red Cross parlor heater is a very artistic and attractive stove. The hot air circulating flues are very effective, because they form the back division flue strips of the heater and are surrounded by the fire continually, while on its passage from the fire pot through the descending and ascending flue chambers to the exit pipe.

The Red Cross Oak has Eclipse grate for coal and register grate for wood, readily interchangeable. A gas ring on top of the fire pot furnishes air to the surface of the fire. The ash pit door is tightly fitted and is constructed with a screw register draft damper. A cast iron lining resting on the fire pot protects the jacket from the extreme heat.

One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

THE OAK NOVELTY.

The Abram Cox Stove Co., with Chicago office at 15-19 West Lake street, Chas. A. Rusco, manager, are manufacturers of the Oak Noveltv, shown herewith.

Oak Novelty.

This is a beautiful and original high art Twentieth Century Oak. This is a double heater, having a double casing with an inch air space between, admitting the air at the bottom of the casing. It comes out at the top at an intense heat. This stove is strictly air tight. It has a screw draft in the ash pit door and screw check draft in the feed door. When this stove is desired as a coal burner air passes through the register in front of the stove into the perforated mixer ring around top of the heavy fire pot and then out into the fire, mixing the air with gasses.

The Hardware Record.

Arkansas Retail Hardware Dealers' Association.
Pres., John M. Pitman, Prescott.
1st Vice-Pres., J. F. Maxey, Ozark.
2d Vice-Pres., T. B. Stewart, Newport.
Secy-Treas., J. A. Plummer, Marianna.
Executive Com.: H. Williams, Hot Springs. J. H. Boicourt, Little Rock, J. W. Lee, Fordyce.

Chicago Retail Hardware Association.
Pres., D. McLaughlin.
Vice-Pres., H. E. Gnadt.
Sec., G. R. Lott.
Collector, John Hora.
Treas., I. L. Smith.

Hardware Merchants' and Manufacturers' Association of Philadelphia.
Pres., Hugh McCaffrey.
Vice-Pres., Wm. C. Peters.
Sec.-Treas., T. James Fernley.
Directors, William W. Supplee, Samuel Disston, John H. Griffith, James H. Ritter, William C. Peters, Thomas Devlin, Fayette R. Plumb, Hugh McCaffrey and T. James Fernley.

Illinois Retail Hardware Dealers' Association.
Pres., H. G. Cormick, Centralia.
Vice-Pres., Wm. Bittel, Peoria.
Sec., G. R. Lott, Chicago.
Treas., F. F. Porter, Chicago.
Ex. Com., Z. T. Miller, Bloomington; W. T. Gormley, Chicago; H. N. Murphy, Galesburg; C. Mauer, East St. Louis; C. Williams, Streator; L. Babst, Kankakee.

Indiana Retail Hardware Dealers' Association.
Pres., W. P. Lewis, New Albany.
V.-P., J. L. Hutton, Portland.
Sec. and Treas., M. L. Corey, Argos.
Members Ex. Com., I. A. Sibley, South Bend; E. M. Bush, Evansville; W. H. Weed, Vincennes.

The Retail Hardware Association of the Indian Territory.
Pres., Geo. W. Mowbray, Tulsa.
First Vice-Pres., J. G. Smith, Canadian.
Second Vice-Pres., Fred Parkinson, Wagoner.
Sec., Dick Miller, Poteau.
Treas., Sam R. Frazee, Vinita.

National Retail Hardware Dealers' Association.
Pres., W. P. Lewis, New Albany, Ind.
Vice-Pres., Geo. Hubbard, Flint, Mich.
Sec., M. L. Corey, Argus, Ind.
Treas., H. T. Helgeson, Milton, N. D.
Ex. Com., Z. T. Miller, Bloomington, Ill.; Fred Neudorff, St. Joseph, Mo.; I. A. Sibley, South Bend Ind.; H. A. Cole, Council Bluffs, Ia.; H. G. Cormick, Centralia, Ill.

Iowa Retail Hardware Dealers' Association.
Pres., W. A. McIntire, Ottumwa.
Vice-Pres., E. G. Penrose, Tama.
Sec'y, C. W. Breisford, Council Bluffs.
Treas., W. A. McIntire, Ottumwa.
Ex. Com., A. C. Heyman, Mines; L. Lindenberg, Dubuque; F. S. Narum, Waukon; E. G. Penrose, Tama; W. A. McIntire, Ottumwa; L. H. Kurtz, Des Moines; H. A. Cole, Council Bluffs; Harry Vincent, Ft. Dodge; W. H. Miller, Cherokee; M. W. Keating, Afton; Jacob Seither, Keokuk.

Kansas Hardware Dealers' Ass'n.
Pres., Geo. F. Andersen, St. Marys.
Vice-Pres., Oscar Roehr, Topeka.
Sec., J. A. Cole, Topeka.
Ex. Com., James H. Hamilton, Arkansas City; E. I. King, Logan; T. H. Kinlry, Beloit; J. M. Walters; Robinson; F. W. Bartlett, Kansas City.

Kentucky Retail Hardware and Stove Dealers' Association.
Pres., Geo. Dehler, Louisville
1st V.-P., J. S. Ogden, Ashland.
2nd V.-P., Chas. D. Winn, Paris.
Sec., Paul Wagner, Louisville.
Asst. Sec., Wm. Dehler, Louisville.
Treas., Henry Heick, Louisville.

Michigan Hardware Association.
Pres. Geo. W. Hubbard, Flint.
Vice-Pres., H. C. Minnie, Eaton Rapids.
Sec. Fred H. Cozzens, Detroit.
Treas., H. C. Weber, Detroit.
Ex. Com., C. E. Pipp, Otsego; A. J. Scott, Marine City; J. B. Sperry, Port Huron; A. Harshaw, Delray; G. B. M. Towner, Muskegon, for one year; Jas. J. Potter, Alpena; Jno. W. Iochim, Ispheming; Robt. G. Chandler, Coldwater; John Popp, Saginaw; F. S. Carlton, Calumet, two years.

Minnesota Retail Hardware Association.
Pres., W. H. Tomlinson, LeSueur.
Vice-Pres., H. S. Cleveland, Minneapolis.
Sec., T. McCracken, Minneapolis.
Treas., G. M. Evanson, St. Peter.
Ex. Com., F. H. Hunt, Red Lake Falls; B. J. Kernkamp, St. Paul; Julius Schmidt, Wabasha; W. H. Tomlinson, LeSueur; A. C. Hatch, Battle Lake; Jos. Mason, St. Peter; Chas. F. Ladner, St. Cloud; S. R. Nelson, Owatonna; E. H. Loyhed, Faribault.

Missouri Retail Stove and Hardware Dealers' Association.
Pres., B. F. Naylor, Marshall.
V.-P., Geo. R. Plowman, St. Louis.
Sec., F. N. Neudorff, St. Joseph.
Ex. Com., R. L. Hixon, Hannibal; F. A. Kannlsteiner, St. Louis; J. W. Poland, Carrollton; W. A. Wingert, Kansas City.
Advisory Board, P. E. Harney, Joplin; E. Stuelzing, Kansas City; J. M. Kenyon, Maitland; W. T. Shoop, Richmond; G. A. Pauly, St. Louis.

National Hardware Association.
Pres., John Bindley, Pittsburg.
First Vice-Pres., R. W. Shapleigh, St. Louis.
Second Vice-Pres., Brace Hayden San Francisco.
Sec-Treas., T. James Fernley, Philadelphia.
Ex. Com., W. K. Belknap, Louisville; John C. Koch, Milwaukee; R. A. Kirk, St. Paul; Samuel A. Bigelow Boston; P. E. Strauss, Boston; J. D. Moore, Birmingham.

North Dakota Retail Hardware Dealers' Association.
Pres., H. T. Helgesen, Milton.
Vice-Pres., H. N. Joy, Hamilton.
Treas., W. H. Pinkerton, Lakota.
Sec., C. N. Barnes, Grand Forks.
Ex. Com., H. Harrington, Fargo; W. W. Jamieson, Wahpeton; H. F. Strehlow, Casselton; I. L. Newgard, Grafton; H. B. Allen, Jamestown; H. A. Mae, Church's Ferry.

Ohio Hardware Association.
Pres., O. M. Scott, Marysville.
Vice-Pres., W. P. Bogardus, Mt. Vernon.
Cor. Sec., Geo. Gray, Coshocton.
Financial Sec., Will C. Jones, Columbus.
Treas. H. G. Woodward, Sidney.
Ex. Com., Geo. B. Meyer, Cincinnati; Geo. V. Guyton, Ada; H. F. Rahe, Cleveland; J. Rohrbacher, Akron; A. H. Strome, Warsaw; Frank Winters, Lancaster; James B. Carson, Hamilton; R. Brown, Washton Court House.

Philadelphia Retail Hardware Dealers' Association.
Pres., Frank Schmidt.
Vice-Pres., Julius M. Aff.
Sec., T. B. Hendricksen.
Treas. Edward H. Shannon.
Trustees, Wm. E. Andrews, Lewis C. Gladding and Aaron I. Sanson.

St Louis Stove Dealers' Ass'n.
Pres., F. A. Kansteiner.
First Vice-Pres., Aug. Steinmeyer.
Second Vice Pres., Aug. Gruendler.
Sec., A. F. Geschwindner.
Treas., L. J. Boehl.

Southern Hardware Jobbers' Association.
Pres., J. D. Moore, Birmingham, Ala.
Vice-Pres., C. E. Speer, Ft. Smith Ark.
Second Vice-Pres., F. W. Heitmann, Fort Worth, Tex.
Sec., C. B. Carter, Knoxville, Tenn.
Ex. Com., C. H. Ireland, Greensboro, N. C.; G. W. Barnett, Montgomery, Ala.; O. B. Barker, Lynchburg, Va.; Wm. Crumley.

Texas Hardware Jobbers' Association.
Pres., F. A. Heitman, Houston.
First Vice-Pres., J. C. Bering, Houston.
Second Vice-Pres., Ed. Strauss, Waco.
Sec.-Treas., Robert Eikel, Houston.
Ex. Com., Jas. Moroney, Dallas; R. F. Bell, Weatherford; W. L. Sanford, Sherman; A. E. Goeth, Austin.

Wisconsin Retail Hardware Dealers' Association.
Pres., John Hessel, Antigo.
Vice-Pres., Otto Schlafer, Appleton.
Sec., C. A. Peck, Berlin.
Treas., George Leverenz, New Holstein.
Ex. Com., Henry Droegkamp, Milwaukee; Aurhur Helms, Tigerton E. H. Ramm, New London; J. Vilkie, Fond du Lac

It is said that the attempted combination of shovel manufacturers has not yet been consummated.

The capital stock of the Fletcher Hardware Co., Detroit, has been increased from $150,000 to $200,000.

The Fox Bros. Hardware Co., Pine Bluff, Ark., have been incorporated with a capital stock of $100,000. Fred Fox is the president of the concern.

The Manufacturers' Association of Dayton, O., have won their injunction suit against the Metal Polishers' Union No. 5, and the latter will have to pay $586 as costs.

C. E. Pipp, Otsego, Mich., a member of the Executive Committee of the Michigan Hardware Association, has been chosen president of the Otsego Business Men's Association.

A number of Chicago and St. Louis capitalists are organizing a company to develop the Kentucky iron fields. Two 100-ton furnaces have been established at Grand Rivers, that state.

Thomas P. Smith will associate himself with the Turner Hardware Co., Muskogee, I. T. Mr. Smith is an experienced hardware man, having lately served as secretary of the Pacific Coast Hardware & Metal Association.

The W. W. Dickinson Hardware Co., Little Rock, Ark., have been experiencing an active growth in their business, and have increased their capital stock from $50,000 to $150,000. W. W. Dickinson is president of this company, C. C. Rose is vice president and G. H. Lynon is secretary and treasurer.

Moses A. Thayer died at his residence, 6740 Lafayette avenue, Chicago, on July 24. The funeral was held July 26, 11 a. m. Mr. Thayer came to Chicago in 1852, engaging in the hardware manufacturing business. In 1860 he furnished the campaign torches used in Lincoln's presidential campaign.

The trade will learn with deep regret that Geo. F. Anderson, president and manager of the Anderson Hardware & Furniture Co., Inc., St. Marys, Kan., and also president of the Kansas Retail Hardware Dealers' Association, is suffering from a stroke of paralysis, and has been unable to attend to business.

It is said that a paint combine has been formed and that shortly the United States Paint Corporation, capitalized at $100,000,000, will be incorporated. The circular sent out by the promoters of this latest consolidation denies that they are going to form a trust, but they will seek the "highest and greatest economy in production and distribution." How familiar these innocent words seem anyway.

The Simmons Hardware Co., St. Louis, Mo., have reincorporated, owing to the expiration of the original articles of incorporation by limitation. Their capital stock is $4,500,000, divided into $1,500,000 common, $1,500,000 first preferred and $1,500,000 second preferred. The stockholders named in the incorporators' papers are E. C. Simmons, I. W. Norton, W. D. Simmons, A. E. Dann, G. R. Barclay and F. N. Johnson.

The J. D. Warren Mfg. Co., Chicago, have recently received advance orders for their new styles of cabinets, cases, bins, etc., from Loftus & Loftus, Park River, N. D.; R. M. Pyburn Hardware Co., Roxton, Tex.; C. H. Thomas & Co., Kent, Ia.; Z. C. Miles & Piper Co., Seattle, Wash.; Geo. E. Brigham, Shelby, Neb.; H. S. Bettes Hardware Co., Paris, Tex.; Hahne & Co., Newark, N. J.; Marifjeren & Overbye, Park River, N. D., and O. E. Hasle, Park River, N. D.

DEATH OF SIMEON L. ROGERS.

The trade will learn with deep regret of the death of Simeon L. Rogers, which took place July 21, at Lake Compounce, Conn., from apoplexy. Mr. Rogers was a member of the Simeon L. and George H. Rogers Co., Hartford, Conn., manufacturers of sterling silver and silver plated ware. He was in his fifty-fifth year, and was a son of the late Simeon S. Rogers, one of the three original Rogers Bros. Mr. Rogers was a genial, enterprising man, and while his business career was embittered by the unjust and persistent attacks of the silverware trust, he made many friends in the trade, and all who came in contact with him feel that in his death in the prime of his later manhood something has been taken out of their lives which can never be replaced.

ART PORTFOLIOS.

E. C. Atkins & Co., Indianapolis, Ind., have just published two series of art portfolios, each of which contains 16 suberb photographic reproductions on heavy tinted paper, 10x14 inches, with descriptive text. These scenes are as follows: American Navy Series—Part 1, the great battleships and cruisers; part 2, naval architecture and naval scenes; part 3, all about the "Maine;" part 4, the hero of Manila and his fleet; part 5, the heroes of Santiago Bay and naval types, new and old. Cuban Series—Part 6, historic scenes of the Spanish war; part 7, Cuba, Havana and inland; part 8, the beauty of art and nature; part 9, characteristic views of Cuban life; part 10, the fated fleet and its conqueror. These ten parts (each complete in itself) form a collection of one hundred and sixty magnificent reproductions of scenes and objects of historic interest. While they last these will be mailed on receipt of two two-cent stamps for each part, or 20 cents for either series of 5 parts. It need hardly be remarked that this is about 80 10 and 10 and 5 per cent below publishers' prices.

PADLOCKS.

The Mallory, Wheeler Co., New Haven, Conn., favor us with their very handsome 1901 padlock catalogue. Their line includes steel and wrought brass padlocks, cast bronze and brass padlocks, dog collar or small padlocks, Scandinavian padlocks, wrought iron padlocks, galvanized wrought iron padlocks and gun metal switch padlocks. Their brass and steel padlocks are self-locking, with spring shackle and milled key bushing. They are so constructed that they lock shackle at both heel and nose, affording double security.

Their cast bronze padlocks are self-locking, spring shackle, all brass inside works, milled key bushings, heavy throw back on shackle and extra large opening.

Their cast bronze padlocks, extra heavy sand finish, for railroads, express companies and heavy work, have spring shackle, are self-locking, have spring key drop, all inside parts of cast bronze metal, all springs phosphor bronze.

THE BLIZZARD NO. 2 DASH LAMP.

The R. E. Dietz Co., New York, are manufacturers of the Dietz No. 2 Blizzard dash lamp, shown herewith. This lamp burns kereosene. It is japanned blue, takes a 1-inch burner and blizzard globe, and holds oil to burn 19 hours. The oil pots of these lanterns are drawn from tinned sheet steel, and are retinned after being shaped. This adds largely to their lasting qualities. The Dietz No. 1 and 2 Blizzard dash lamps are made on the new cold-blast principle, give an extra fine light and will stay alight in any wind. They are very convenient combination lanterns and can be used as hand lanterns, wall lamps or dash lamps, and are fitted with the same convenient side lift as this firm's regular Blizzard lanterns. For use on the dash each lamp is provided with a strong spring to clasp over the dash.

Dietz No. 2 The Blizzard Dash Lamp.

THE MRS. VAN DEUSEN EGG WHIP.

C. A. Chapman, 279 Exchange street, Geneva, N. Y., is the manufacturer of The Mrs. Van Deusen egg whip, shown in the accompanying cut. This whip is made from a solid piece of tin and has a strength and stability not found in wire beaters, it is claimed. The grooved feature adds materially to the effectiveness and durability of this whip, which is especially designed for whipping the whites of eggs, cream, or any-

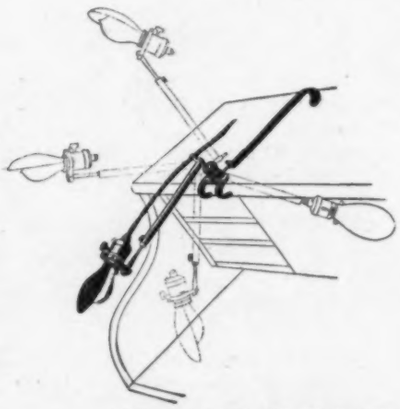
The Mrs. Van Deusen Egg Whip.

thing where it is necessary to fill the mass with air-cells in order to obtain the best results. This whip is made in two sizes, and has met with a large sale, as it was invented by a woman for the express purpose of overcoming the difficulties she had encountered in whipping eggs.

Mr. Chapman is meeting with a large sale of this and other hardware specialties. The following jobbers west of Buffalo have placed orders for his More's reversible corn popper: Fletcher Hardware Co., Detroit; Mich.; Standartt Bros., Detroit, Mich.; Clark, Rutka, Jewell Co., Grand Rapids, Mich.; The Geo. Worthington Co., Cleveland, O.; The Lockwood Taylor Co., Cleveland, O.; The Stollberg, Clapp Co., Toledo, O.; Kruse & Bahlman Co., Cincinnati, O.; Bode Hardware Co., Cincinnati, O.; Smith Bros. Hardware Co., Columbus, O.; Brindley Hardware Co., Pittsburg, Pa.; Logan & Gregg Hardware Co., Pittsburg, Pa.; Lyman & Carey Hardware Co., Indianapolis, Ind.; Edward Hunts' Sons, Chicago, Ill.; R. D. Cone & Co., Winona, Minn.; Fred Kroner Hardware Co., La Crosse, Wis.; A. Treadway & Sons, Dubuque, Ia.; Schrieber, Conchar & Westphal Co., Dubuque, Ia.; J. D. Seeberger, Des Moines, Ia.; Knapp & Spencer Co., Sioux City, Ia.; Empkie, Shugart Co., Council Bluffs, Ia.; Wyeth Hardware Co., St. Joseph, Mo.; Richards & Conover Hardware Co., Kansas City, Mo.; Lee, Glass, Andreesen Co., Omaha Neb., and Rector & Wilhelmy Co., Omaha, Neb.

THE FERGUSON ELCETRIC LIGHT BRACKET.

The Smith & Hemenway Co., 296 Broadway, New York, are manufacturers of the Ferguson adjustable lamp bracket, shown in the accompanying cut. This bracket is adjustable to any size roll top desk or upright piano, and can be fastened on without the assistance of screws or nails. The reflector can be placed at any desired angle to prevent a glare in the eyes. It is handsomely finished in enamel and nickel. It is simple in construction and operation, and is quickly adjusted.



Ferguson Electric Light Bracket.

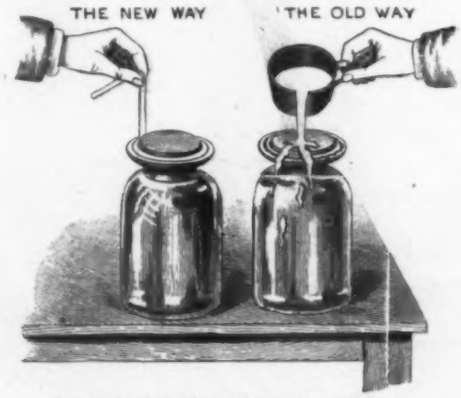
A few of the angles at which it can be placed are shown in the illustration.

SEVEN REASONS.

The H. F. Brammer Mfg. Co., Davenport, Ia., send us an interesting circular describing their O K washer, which is claimed to be the best rotary washing machine made on account of the following seven reasons: (1) It is the only rotary washer that has revolving steel ball gearing, reducing the friction and thus making the machine so light running and almost noiseless. (2) The tub is made of Louisiana red cypress lumber; the legs are solid with tub (not removable, breakable legs, fastened with screws). (3) The wheel turns right or left, pin wheel or dasher reverses automatically, turning the clothes back and forth through the hot soapsuds, and cleaning them without rubbing them to pieces. (4) This washer is made by experienced mechanics, and will outlast any other washer on the market. (5) The tub has a wringer box, fastened with steel brackets. (6) The lid on tub closes tight, no escape of steam. (7) Has gilded hoops, castings and name.

IMPROVED SELF-MELTING WAX STRINGS.

C. C. Fouts, Middletown, O., is introducing to the trade Geo. W. Coddington's patent standard improved self-melting wax strings, shown in the accompanying

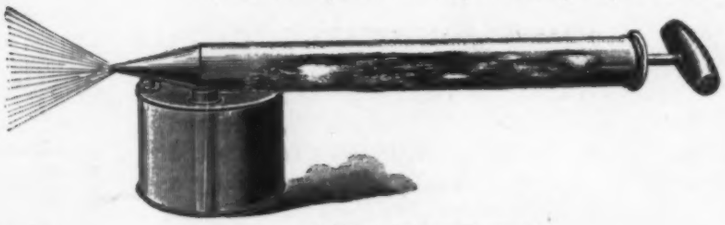


Improved Self-Melting Wax Strings.

cut. This device is invaluable for sealing fruit cans and jars. They do not loosen from contraction and expansion. They can be used on any kind of fruit jar or can, and can be used successfully on any imperfect jar that cannot be sealed with regular fittings. They are easily sealed or opened.

ILLINOIS INSECT DESTROYER.

J. H. Jones, lock box 33, Streator, Ill., is manu-



Illinois Insect Destroyer.

facturer of the Illinois insect destroyer, shown in the accompanying cut. This sprayer is claimed to be very durable, effective in use and convenient to clean. It is extensively used by scientific farmers in the potato patch, peach orchard, the garden and poultry yards and buildings. It requires a minimum of poison and throws a very large spray. It is claimed that milch cows will give twice the milk in warm weather when sprayed with

the Illinois sprayer to keep away the flies. Complete formulae for various insect destroying emulsions are furnished with each sprayer sold.

LANE'S BALL-BEARING STORE LADDER.

Lane Bros. Co., Poughkeepsie, N. Y., are manufacturers of Lane's ball-bearing store ladder, shown in the accompanying cut. These ladders are made of ash or

Lane's Ball-Bearing Store Ladder.

oak. When a bend is made in the side bars the sections are connected by steel plates made to fit each particular angle. The grain of the wood is filled and finished with two coats of varnish. All the metal fittings are tinned. This ladder can be erected in almost any store without altering the shelving or obstructing the floor or counter in any way. The ladder carriage is mounted on ball-bearing wheels, which have a fiber tread.

SCISSORS AND SHEARS.

The National Cutlery Co., Philadelphia, Pa., send us their latest catalogue of steel-laid scissors, shears and snips. The National tailors' shears, style "A," are laid with special steel of superior quality, tempered by a patented method. All this firm's candy shears are made with screw or steel lock, nut and bolt, and in both polished and nickel plated blades at no extra cost. All their glass shears are made with screw or steel lock, nut and bolt. This firm make a complete line of dental shears and snips in connection with their other high grade scissors and shears.

The National forged tinners' shears, Philadelphia pattern, in addition to the work that can be done with ordinary straight snips, will cut curves and irregular lines easily and without injuring or burrowing the work. The front, as well as the back, of the jaws is shaped in a peculiar manner to allow the material to pass freely when cutting curves or changing the direction of the cut. The object is accomplished, it is claimed, without weakening the jaws or reducing the efficiency of the snips for ordinary work. These snips are forged from solid steel, and the entire surface of the jaws is laid with this firm's special steel, tempered by patented method and hardened in water.

This firm have been manufacturing high grade scissors, shears and snips for 40 years, and have been manufacturing material for half a century. They received a medal from the Export Exposition, Philadelphia, 1899, and also a medal from the Paris International Universal Exposition of 1900. One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

BUSINESS CHANGES.

NEW FIRMS.

Sparato, Minn.—Bowers & Gallop.
St. Paul, Minn.—The Hill Hardware Co.
Coon Rapids, Ia.—M. O. Ruthrauff.
Gavon, Wash.—A. Lutke.
Dartford, Wash.—Esveldt Bros.
Madison, Wis.—Wolf & Kubi.
Boone, Ia.—The Johnson Hardware Co.

CHANGES.

Fairmount, N. D.—James Davenport succeeds B. W. Dougherty.

Fairfax, S. D.—Thompson & Durfen succeed C. A. Johnson.

Parkston, S. D.—G. & G. W. Meisenholder have dissolved.

Paulina, Ia.—Cottrell & Co succeed Chas. Watts.

Libby, Mont.—A. F. Best is succeeded by Best & Thompson.

Colfax, Ill.—O. A. Collins succeeds R. K. Castle.

Eldred, Minn.—O. M. Kasberg succeeds C. Monson & Son.

St. Ansgar, Ia.—Wm. Asher has sold his interest in the hardware business to C. J. Colbertson.

Bonapante, Ia.—Frank Garr has sold his interest in the hardware business to his partner, Gus Nelson.

Fulton, Mo.—The Chapman Hardware store at 912 E. Broadway has been purchased by S. W. & M. S. Johnson, who will continue the business.

Sterling, Ill.—T. G. Seely is now owner of the Meister & Seely hardware store, having bought out his partner, J. C. Meister.

STOPPAGES.

Fairmount, N. D.—H. W. Dougherty.
Davenport, Wash.—A Lutke.

MISCELLANEOUS.

Lone Rock, Wis.—Beckwith, fire.
Rockford, Ill.—McGuire Bros., fire.
Ledyard, Ia.—J. W. Neister, fire. Loss $2,500; insurance $700.

BORN WITH THEIR BOOTS ON.

"Yes, I'm pretty well fixed," remarked the western millionaire. "I began life a barefoot boy and—" "Of course; but is that unusual out your way?" "Well, yes; I'm rather an exception." "Well, well! I know it's quite common in the west for one to die with his boots on, but I didn't know you folks were born that way, too."—Philadelphia Press.

Advertising Department.

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

The Weis & Fisher Co. have a nice advertisement well displayed an nicely balanced as to cuts and matter. The only corrections we would make would be to change the words "Ranney Refrigerators" into the

same type as the words "Blue Flame Oil Stoves." The dash over the signature is also a blur on the advertisement showing the compositor did not know how else to utilize the space.

The accompanying advertisement of the Standard Oil Co., is a very striking presentation of the merits of these popular oil stoves. The fact that they are equally serviceable for light or heavy cooking is brought out

in a forceful manner, and the other points, such as absolute control in all cooking, safety and absence of smoke, soot and odor are concisely and clearly brought out. The information it contains is exactly the character a prospective buyer of an oil stove is looking for.

This advertisement of Peterson & Huffaker is a very good one for a retail house. It is well displayed, and, while containing considerable information, is not

overcrowded. The cut of the refrigerator is an unusually good one, showing both the external and interior appearance.

The accompanying advertisement of C. M. Doxsee, the Algona, Ia., hardware dealer, appeared earlier in the season, when the people were buying "summer doors and

windows" in large quantities. The seasonableness of the goods and the cogent detailed description, which is interesting reading to all house owners, makes this a hard advertisement to improve on.

HARVEST HOLD-UPS.

Highwaymen are holding up Kansas harvest hands. It is almost as profitable as robbing a bank.—Indianapolis News.

PRACTICE MAKES PERFECT.

"Oh! what a tangled web we weave
When first we practice to deceive!"
But after we have tried a bit
We make a better job of it.
—Philadelphia Record.

Heating and Ventilating.

The Standard Register Co., East Madison Ave. and Nickel Plate Depot, Cleveland, O., manufacture a complete line of registers, ventilators and register faces.

The Monroe Foundry and Furnace Co., Monroe, Mich., have just completed a new molding shop for their plant. This shop is 78x142 feet in size, complete with traveling crane. This latest addition doubles the former capacity of this firm's plant.

The Utica Heater Co., Utica, N. Y., manufacturers of Superior warm air furnaces and heating apparatus, have made arrangements to take splendid care of their large and constantly growing western trade. The Chicago Heater & Supply Co. have been incorporated to act as western agents and managers for their lines of furnaces and boilers, and will take orders for these goods west of the Indiana state line. They will carry stock so as to promptly fill all small orders. The Chicago Heater and Supply Co. have secured well lighted and commodious quarters on the first floor at 54 Dearborn street, Chicago. The officers of this company are all experienced heating men who are well and favorably known to the western trade.

ROYAL RADIATOR SHIELD.

The Twin Burner Vapor Stove Co., 206-210 S. Seventeenth street, St. Louis, Mo., are manufacturers of the Royal radiator shield, shown in the accompanying cut. This shield is a preventative of wall discoloration from the constant currents of warm air rising from every radiator as it deflects this current. This shield is very neat in appearance, easily attached or detached, and is more satisfactorily adjustable than any shield on the market, it is claimed. A strong point in its favor is that it is adjustable to any radiator.

Royal Radiator Shield.

HEATING A SCHOOL HOUSE.

Enclosed find a sketch of school house in which the board of trustees wants to place a hot water heating plant and some system of ventilation, but are restricted in money matters, and I would like to have your Mr. Lawler's plan of a good, effective system, but not anything elaborate, as soon as possible, for the work must be completed by Sept. 5th, 1901. O. H. ALLINSON.

Jobstown, N. J., July 18, 1901.

P. S.—The ceiling is 12 feet. It is a frame building. There is no cellar except a pit for boiler and coal. It will be plastered on sides and ceilings. The pit and chimney can be placed where they are to the best advantage. What size boiler could it be heated with if coils were used instead of radiation?

ANSWER BY JAMES J. LAWLER.

In compliance with our subscriber's request, we have laid out a hot water heating system that we think will meet with approval for the school house in question.

As there is to be no cellar under this building except a space large enough for the boiler and coal, nothing but an overhead pipe system would be practical, hence there is hardly any option as to that. Yet, at the same time, an overhead pipe system is the most economical, as the supply and return pipes all serve as radiating surface. We should locate the boiler and chimney about in the center of the building on the north side, as shown on plan Fig. 1, and we should build the chimney to a height of a few feet above the peak or highest part of the roof, as shown in elevation sketch, Fig. 3. And to provide for ventilation we should place in the brick chimney a cast iron pipe of 8 inches diameter, having hub joints, as shown, which will act as the smoke pipe from heater, this pipe to extend to top of brick chimney, and allowing a space between the inside of brick and the cast iron smoke pipe of about 3 inches, which space would act as the ventilating channel. The cast iron pipe to be stayed at various points by placing a brick close to it extending from brick wall, as also shown in Fig. 3. At the floor on each side of flue, one in each room, place a ventilating register or register face, so that it would remain open at all times; and this being as long as the inside width of flue will permit, and 10 to 12 inches high, so that all foul air will be drawn from the floor of the rooms. It will not be necessary to provide any special inlet of fresh air in this case, as the doors are in the opposite side of rooms, which will be opened quite frequently, allowing all the necessary fresh air to enter, not to speak of that which will find its way in through the windows.

RADIATION NECESSARY.

There is nothing saved at the present prices of steam pipe in using coils in place of radiators, therefore I should prefer to use radiators. As we provide ventilation in this plant it will require more radiation than without ventilation, and, taking this point, as well as all others, into consideration, we allow 150 square feet of radiation for each room in addition to the surface in the flow and return pipes. We have located

the radiators where we consider them to do the best work, as shown on floor plan, Fig. 1. In sketch, Fig. 2, we show how we should run the pipes from boiler to radiators, and from radiators back to boiler, also giving size of same. A 15-gallon expansion tank is placed as near the ceiling as practical, having overflow connection made as shown. The main flow pipe is carried within a few inches of the bottom of expansion tank, then extending horizontally in both directions at this height, and having a slight fall down to last radiator on the lines. Branches are taken from this main flow pipe, which enter the top of radiators, with the outlets from radiators in opposite ends and connecting with return pipes, which will rest on the floor, having also a slight pitch to the boiler, make all connections to radiators with one inch pipe. The flow pipe may be reduced, as marked, in passing to the various radiators, and the return pipe must be increased in the same manner as it comes near the boiler. If piped in this manner, as shown, there will be no necessity of using any air valves, as all air will find its way to the expansion tank, where it will escape to ventilating flues. It will be necessary to have water in the expansion tank in order to have circulation, and by connecting the overflow pipes from tank, as shown, there can be no siphoning of the tank in case of overflows, for the reason that air will pass down through the vent pipe. The placing of the tank vent in the warm flue, as shown, will be a safeguard against freezing, thus keeping the system open to the atmosphere at all times, which means a safety outlet. It would pay to place on the boiler a hot water damper regulator, for the purpose of preventing the water boiling over, as this could easily happen by neglecting the drafts.

The boiler for this size plant should have a capacity of about seven hundred square feet of radiation.

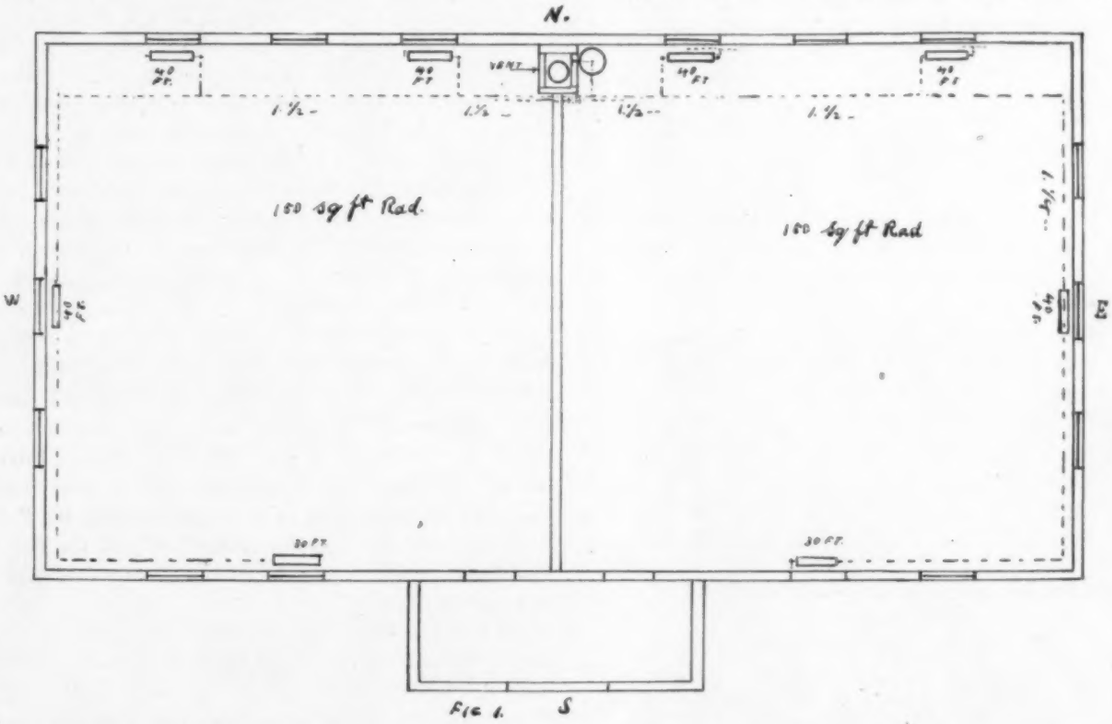


Fig 1.

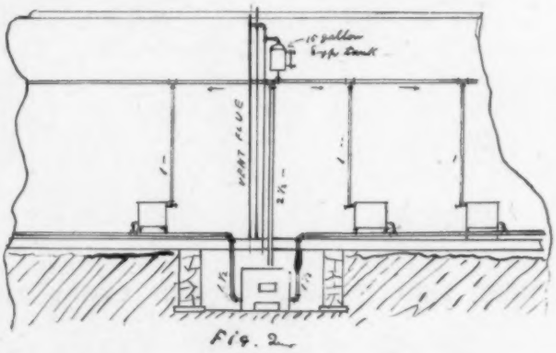


Fig. 2.

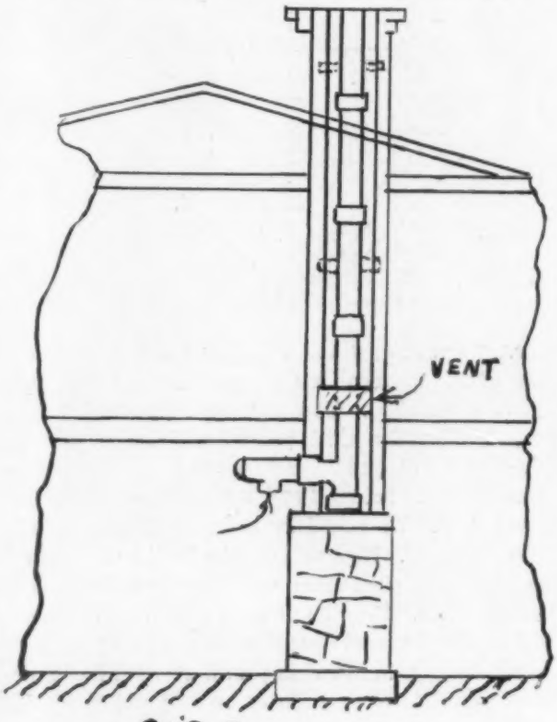


Fig. 3.

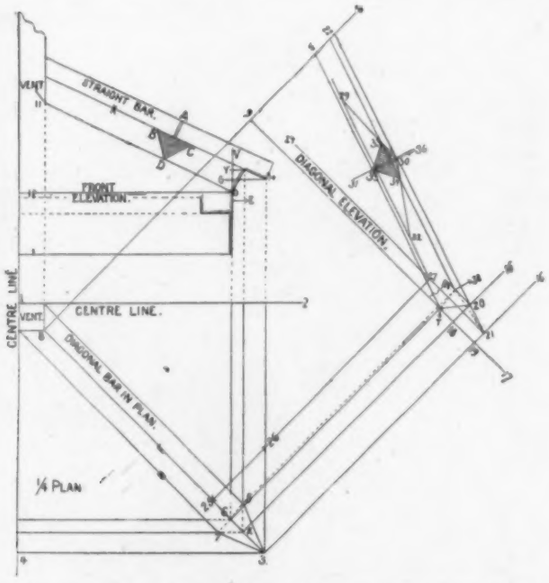
Tinshop.

TO OBTAIN PROFILES IN SKYLIGHT WORK.

To The American Artisan.

To obtain the profile of the hip or corner bar in making skylights, the profile of t hestraight bar being given, this method of procedure should be followed: Let *A, B, C* and *D* be the profile of the given straight bar, as shown on elevation. *E* indicates the base, as shown on elevation. Let *1, 2, 3* and *4* represent ¼ plan view; the dotted lines, drawn upward from plan to elevation, show their relation to each other. The vent, as shown on plan and elevation, can be left out if desired.

The diagonal line *F* in plan indicates the top edge of bar *A*, as shown on elevation. Now take the width of straight bar, *B* and *C*, in elevation, and place it, as shown in plan by *H, J;* that is, on each side of the center diagonal line *F*. Continue the diagonal line *F* in plan until it meets the corner *3;* also continue line *H* and *J* in plan until they meet the points *5* and *7*. Now draw a line from *3* to *5* and 3 to *7*. Then from *5* to *6* and *6*



to *7*. Then *3, 5, 6* and *7* indicates the miter line in plan of the diagonal bar when set on the base *E*, as shown in elevation. The next step is to obtain a diagonal elevation, for which proceed as follows: At right angles to the diagonal line *F* in plan draw two lines indefinitely from points *6* and *8* in plan, as shown by *8 S* and *6, T*. We now draw a line parallel to *3, 8,* as shown by *9, T*. We now take the height of *11, 12* in elevation, and place same, as shown by *9, W,* in diagonal elevation. Draw a line from *T* to *W* and the result will be the diagonal elevation, as shown by *W, T, 9*. At right angles to line *F* in plan draw lines indefinitely from points *x* and *3*, as shown by *x 15* and *3, 16*. Extend the line *T, 9* in diagonal elevation, as shown by *17*. Also extend the line of profile of base *E*, front elevation, as shown by *E, O, V*. At right angles to *E, O, V* extend lines *13, Y* and *14, G*. Now take the distance from *O* to *Y* and place same on line *15, x,* diagonal elevation, as shown from *18* to *20*. Also take the distance *14* on front elevation. Now draw a line as shown from *21* to *22* diagonal elevation, parallel with *W, T,* which corresponds with line *K* of straight bar, front elevation.

We now draw any line parallel with *9, 17,* as shown by *21, 24,* diagonal elevation; also drawn a line, as shown by *20, 28,* also parallel with *9,* 17. Now at right angles to the diagonal line *F* in plan draw a line as shown from *25* to *27,* intersecting the line *21, 24,* diagonal elevation. At the point of intersection *27* draw a line parallel to *W, T,* as shown by *27, 29*. At any convenient point in diagonal elevation draw a line at right angles to *W, T,* as shown by *30, 31*. Now take the distance *25, 26* in plan and place same on each side of line *30, 31* on the line *27, 29,* as shown by *29, 32*. Draw a line from *29* to *30* and from *30* to *32,* as shown. Now take the width of *F, J* in plan, or, what is the same, half of the width of straight bar *B, C,* and place it on each side of line *30, 31,* diagonal elevation, as shown by *33, 34* on a line parallel to *W. T,* intersecting the line *29, 30* and *30, 32* at points *33, 34*. Now connect *30* to *33* to *35* on the line *W, T* to *24* to *30,* and add the top flange *30, 36* and the result will be the profile of hip bar from a given straight bar, as requested.

From the point *5* in plan we draw a dotted line, as shown, at right angels to diagonal line *F,* upward until it intersects the line *20, 28,* as shown at *38*. Now if the profile of hip bar is correct a line drawn through points *33, 34* must intersect at the intersection *38,* as shown. Now draw a dotted line from *21* to *38* and from *38* to *T,* which represents the miter joint of diagonal bar on base. The same rules hold good for the miter joint at the top vent, but is not shown.

Lansing, Mich., July 22, 1901. "A. J. B."

YOU LIGHT A MATCH, THE REST FOLLOWS

To The American Artisan.

Some one recently wanted to know how to remedy leaky tar and gravel roof. Let him try this: Carefully remove the roof, in one roll if possible, take the rolled up roof onto a vacant lot, raise it on end, and soak the inside well with benzine until it flows out below, then apply a match, the rest will folow.

Fred Schuster

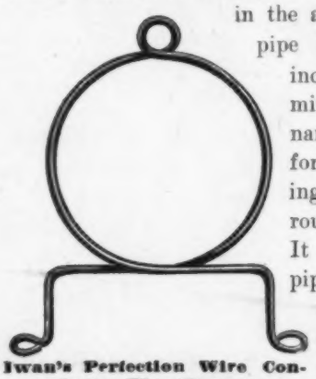
Sauk Rapids, Minn., July 25, 1901.

THERE SHOULD BE A COPY IN EVERY TIN SHOP.

S. E. McLaughlin, Woodhull, Ill., writes: "The Tinsmiths' Pattern Manual was received in due time, and I have made a careful study of same, and must say that I am well pleased with it. It is entirely up-to-date, and I think one of the simplest and most practical works that has ever been published on the subject. Every tinsmith should have one. I would say to the hardware merchants of the U. S., if your tinner has not a copy in your shop buy one and let him use it, it will be equal to the most useful tool in your shop and will save you time and money."

IWAN'S PERFECTION WIRE CONDUCTOR PIPE HANGER.

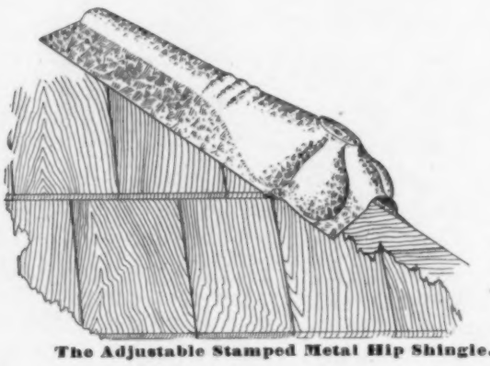
Iwan Bros., Streator, Ill., are manufacturers of Iwan's Perfection wire conductor pipe hanger, shown in the accompanying cut. This pipe hanger holds pipe one inch from building to permit painting. It looks ornamental. It can be used for frame or brick buildings. It can be used for round or corrugated pipe. It completely encircles the pipe, holding it firmly on all sides. The hanger can be tightened as desired by giving the eye a twist. For two-inch corrugated pipe a 2½-inch hanger is required. Other pipe runs uniform.



Iwan's Perfection Wire Conductor Pipe Hanger.

THE ADJUSTABLE STAMPED METAL HIP SHINGLE.

The Galesburg Cornice Works, Galesburg, Ill., are manufacturers of the "Adjustable" stamped metal hip shingle, shown in the accompanying cut. These shingles



The Adjustable Stamped Metal Hip Shingle.

are stamped from tin, galvanized iron or copper. They make a very ornamental hip finish, are easy to lay, do away with close joints in shingles and are an effectual protection against leaks and curling shingles. They are laid in each course of shingles or slate, and the offset or shoulder shown fits against the butts of the shingles, forming a gauge and effectually excluding the rain and snow.

LISK'S PATENT ANTI-RUSTING TINWARE.

The Lisk Manufacturing Company, Ltd., Canandaigua, N. Y., send us a copy of their new catalogue of patent anti-rusting tinware. This book contains a number of new features, including a facsimile of their lithographed guarantee given purchasers of this tinware. This very liberal guarantee reads as follows: "We, the undersigned officers of the Lisk Manufacturing Co., Limited, do hereby guarantee and warrant each and every piece of our anti-rusting tinware against rust. Should any be returned rusted at any time we guarantee to replace each and every piece with new goods free of charge. We insist upon this guarantee being given to the consumer with every article purchased."

Their line of goods shown in this volume includes a great variety of anti-rusting pails, strainer pails, dinner pails, covered pails, cream pails, dippers, milk strainers, milk cans, wash basins, pudding pans, pie tins, sauce pans, preserving kettles, dish pans, bread raising pans, tea kettles, wash boilers, sprinklers, coffee pots, tea pots, coffee boilers, measures, cups, oil cans, chamber pails, foot baths, water carriers, toilet sets, bath tubs, roasters, etc. One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

TINNERS SUPPLIES.

Riter Bros. & Co., 1022 Race St., Philadelphia, send us their latest catalogue of tin plate, sheet iron and tinners' supplies. Riter's Guaranteed Hand Dipped plate, 46 pounds coating, is made by the palm oil process. Each sheet is stamped. Other plates offered the trade by this firm are Riter's Roofing, 35 pounds coating; Riter's Extra, 25 pounds coating; Riter's Special and Old Method, 20 pounds coating; Riter's Lehigh, 15 pounds coating; Riter's York, 10 pounds coating. Riter's ready roll roofing, in rolls 20 inches wide by 64 1-3 feet ong, contain 107 square feet, and in rolls 28 inches by 45 7-12 feet long, contain 106 1-3 square feet. Riter's Bright heavy coated bright plate, is a heavy coated finely finished plate for ware, and the Chester Bright is a lower grade for heater pipe.

A very complete line of roofing goods is shown, including galvanized iron, corrugated iron, Riter's cleaned black iron, patent planished iron and U. S. polished steel, tinned iron sheets, sheet zinc, solder, sheet copper, galvanized conductor, square corrugated conductor, corrugated galvanized elbows and shoes, galvanized gutter, mitres of galvanized iron, Earle's ventilator, wire hangers, twisted wire hooks, rivets, stove belts, bent rung ladders, elbows, dampers, damper knobs, tin hot air pipe, register boxes, milk cans, coal hods, paint, wash boilers, tinned eaves, galvanized iron finials, tinners' machines, slaters' tools, etc. One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

THE LATEST DEVELOPMENTS IN THE STEEL STRIKE.

The interest in the strike of the Amalgamated Association of Iron, Steel and Tin Workers centered, this past week at Wellsville, O., where The American Sheet Steel Co. put three hot mills at work, operating them only one turn.

The sheet mill employes at Vandergrift, Pa., Apollo, Pa., Saltsburg, Pa., and Leechburg, Pa., refused to join the strike, as did the men at Duncanville and McKeesport. The week, if anything, shows no marked new advantages for either the United States Steel Corporation or the Amalgamated Association.

NOTES AND QUERIES.

LIGHTNING RODS.

From Ed Piper, Stryker, O.

Let me know the addresses of firms handling lightning rods?

(We refer you to page 33, issue of May 18, 1901.)

SUSPENSION FOOT BRIDGES.

From C. C. Arbogast, Monterey, Va.

Where can I buy suspension foot bridges?

Ans.—John A. Roebling's Sons, 117 Liberty street, New York.

FOSTER REGISTERS.

From "Reader," Peoria, Ill,

In response to recent question of E. P. Sprague, Carbondale, Ill., would state that F. Meyer & Bro. Co., Peoria, Ill., handle the Foster side wall warm air register.

SHEET COPPER.

From St. Paul Roofing, Cornice & Ornament Co., St. Paul Minn.

Would like addresses of mills making sheet copper?

Ans.—Ansonia Brass & Copper Co., 19 Cliff street, New York; Baltimore Copper Smelting & Rolling Co., Baltimore, Md.; Benedict & Burnham Mfg. Co., Waterbury, Conn.; Bridgeport Brass Co., Bridgeport, Conn.; Chicago Brass Co., 76 Monroe street, Chicago; Coe Brass Mfg. Co., Torrington, Conn.; Detroit Copper & Brass Rolling Mills, Detroit, Mich.; Gummey, McFarland & Co., 751 N. Tenth street, Philadelphia, Pa.; Holmes, Booth & Haydens, Inc., Waterbury, Conn.; C. G. Hussey & Co., Pittsburg, Pa.; New Bedford Copper Co., New Bedford, Mass.; Park Bros. & Co., Ltd., Pittsburg, Pa.; Phelps, Dodge & Co., 11 Cliff street, New York; Randolph & Clowes, Waterbury, Conn.; Revere Copper Co., 63 Franklin street, Boston, Mass.; Rome Brass & Copper Co., Rome, N. Y.; Ronalds & Johnson Co., 54 Cliff street, New York; Merchant & Co., Inc., Philadelphia.

ITEMS.

The Lalance & Grosjean Mfg. Co., will shortly place in their plant at Harrisburg, Pa., a couple of electric traveling cranes and seven gas producers.

Francis H. Wilson, William H. Hibbard and Henry E. Hutchinson are the incorporators of the National Can Mfg. Co., Brooklyn, N. Y., capitalized at $200,000.

William Riley, for 16 years with William Stalker, has started in the tin and sheet iron, roofing, stove and furnace repair business at 147 Clinton avenue, North Rochester, N. Y.

John L. Ward, T. B. Agerton, W. S. Poindexter, W. H. Lindsey and J. E. Scott are the incorporators of the Uncle Hiram Roofing Co., Nashville, Tenn., incorporated with a capital stock of $10,000.

W. H. Sweeney and W. K. Gore are among the incorporators of the Western Stamping & Enameling Co., Dubuque, Ia., capitalized at $100,000. These gentlemen have experience in this business and are well known to the trade.

In consequence of the closing of the sheet mills a pronounced scarcity of black and galvanized sheets is reported. As yet jobbers have not advanced prices on their stocks, but it is probable that advances will be made if the mills continue idle several weeks.

The Art Metal Relief Co., Pike and York streets, Covington, Ky., are succeeded by the Edwards Mfg. Co., who are making a complete line of architectural and ornamental sheet metal work and statuary, zinc and copper ornaments and all kinds of relief work.

W. J. Burton & Co., Detroit, Mich., advise us in a recent favor that although galvanized sheets and tin plates have become very hard to find for prompt delivery, they are filling all orders for their regular kinds and sizes by first freight from their stock in Detroit.

Hemp & Co., tin and sheet metal manufacturers, 906-910 South Second street, St. Louis, were victims of fire on July 23. This fire completely gutted their factory, causing a loss of $100,000. Their insurance amounts to $60,000 on the stock and $20,000 on the building.

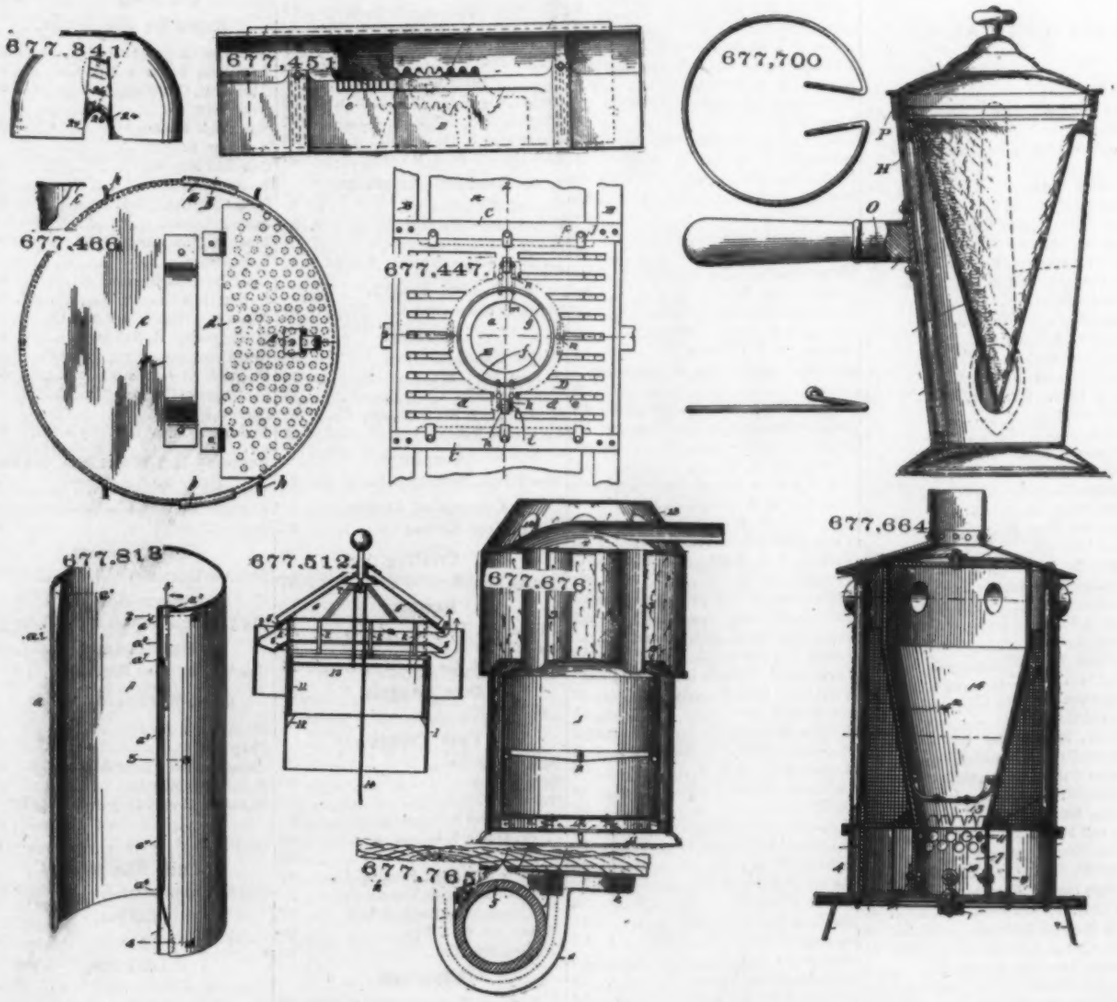
The stamped and pieced tinware departments of the H. Wetter Mfg. Co., Memphis Tenn., will be removed to Canton, O., and made an addition to the Carnahan Stamping & Can Co. This new firm is composed of members of the Berger Mfg. Co., The Carnahan Tin Plate & Sheet Co., The Stark Rolling Mill Co. and the H. Wetter Mfg. Co.

A dispatch from Pittsburg, dated July 23, states that President Shaffer, of the Amalgamated Association of Iron, Steel and Tin Plate Workers, has succumbed to the intense nervous strain he has been under since the steel strike began, and has been forced on account of his health to practically give up the direction of the contest to associate officers.

Manager S. Y. Buckman, of the western branch of the Berger Mfg. Co., has found business so good in his quarters at 1428 North Broadway, St. Louis, that he was forced to seek more commodious quarters. This prosperous branch is now located at 19 and 21 South Main street, that city, where they carry a complete line of metal ceiling, sheet metal roofing and siding, eaves trough, conductor pipe, tin plate, sheet iron and metals, solder, etc.

L. D. Berger, 59 N. Second St., Philadelphia, Pa., sends us a copy of the little booklet entitled "Tinners' and Roofers' Facts," which he publishes now and then. This booklet is written in an interesting manner and contains a variety of attractive advertising cuts. Incidentally mention is made of some of Mr. Berger's goods, such as the L. D. B. solder, L. D. B. star solder, Octo, Gem, Ruby, Old Style, L. D. B. Roofing and L. D. B. Old Method roofing tin. His line of goods includes sheet zinc, wire, gutters, mitres, corrugated pipe, heater pipe, elbows, registers, dampers, collars, bolts, rivets, cut-offs, gutter hangers, roofing paper, roofing nails, cornices, finials, ridge rolls, roofing paint, galvanized iron, black iron, milk cans, ventilators, tools and machines, etc. One of these booklets will be sent the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

Patents.



677,341—Manufacture of stove pipe elbows, etc. Thomas F. Crary, Middleport, Ohio.

677,447—Stove pipe holder. Victor Ethier, Webster, Mass.

677,451—Adjustable fire back. Edward H. Headford, Dubuque, Ia.

677,466—Pot for cooking purposes. Johannes Ortner, Paderborn, Germany.

677,512—Combined skylight and ventilator. Fred M. Harpham and Alfred Akers, Akron, Ohio.

677,664—Heating stove. John E. James, Worthington, Pa., assignor of one-half to Jesse H. King and Hugh M. Willson, same place.

677,676—Hot air furnace. Charles Messer, Corapolis, Pa.

677,700—Coffee pot. Abraham L. Rich, Salt Lake City, Utah.

677,765—Pipe hanger. Henry W. Hoerr, St. Louis, Mo.

677,813—Joint for stove pipes. Arthur St. Arnaud, Ste. Genevieve de Batiscan, Canada.

THE NEW PARTNER.

There is an old gentleman in Detroit who might be called Peace, so gentle is his nature and so deficient is he in combativeness. He has been greatly imposed upon by some mean enough to take advantage of his disposition. Recently he took a partner in, his son, a strapping young fellow, who pulled in the "'varsity" crew and was the all round athlete of his class.

"Is this Peace?" he was asked the other day when he answered the telephone. It was. "Well sir, I got your impudent letter. That stuff I sold you was just what I said it was and just what you agreed to pay for it. What do you mean by telling me I sent you an inferior grade of goods?"

"I think you did." And the lusty youth purposely weakened his voice.

"What, you old shrimp! You dare accuse me of rascality! I'll be down there inside of half an hour, and if you don't apologize and then settle, I'll use you for a club to wreck the office. I'll show you!" And the roar would have terrified the timid old gentleman.

Young Peace got his father to go and see about some stationery for the new firm, set a table and a few chairs against the walls and then waited. The bully came—big, red, noisy and abusive. For about a minute he had vague thoughts of a windmill, a freight train and an earthquake in conjunction. When the old gentleman returned, everything looked natural except the grinning office boy and the trembling creditor.

"Mr. Peace," said the terror tamely, "I'm sorry I did not send the goods you ordered. I'll take them off your hands, or you can pay me what you think is right." —Detroit Free Press.

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SCHOOL BOYS' ESSAYS.

Asked to explain the cause of the Transvaal disturbance, a boy of ten wrote this:

"Kruger and Kannerbulism is one. He is a man of blud. Mr. Chamberling has wrote to him sayin' come out and fite or else give up the blud of the English you have took. He is a boardutchman and a wicked heethin. Lord Kitchener has sent for his goary blud and to bring back his scanderlus hed dedor alive."

Another boy's essay described Mr. Gladstone as having "loved everybody. He loved publicans and cinners and irishmen. he wanted the irish to come to England and have home rule, but Mr. Chamberlain says no, no. so alars he got his blud up and killed Mr. Parnel. Mr. Gladstone died with great respect, and is burrid in Westminster with pieceful ashes."

Compared with these versions of modern history, the following on Queen Elizabeth is faithful: "Queen Elizabeth was a vurgin queen, and she was never marrid. she was so fond of dresses that she was never seen without one on. she was beauteful and clever with a red hed and freckles."—Chambers' Journal.

A CHANCE FOR MEN OVER FIFTY.

There are very few men toiling today with shovels and wheelbarrows or laboring in the smoke and fumes of the upper platforms of the large iron and steel plants of America. Gravitation and electric power have abolished nearly all the hard labor, and science has banished much, if not all, of the smoke and fumes. Obviously, fewer men are required to produce a given amount of pig iron, in the United States plants, than at most of those still in use in Great Britain. For men at work at these new furnaces there is not a tithe of the physical wear, and exposure to heat and other elements, that existed before electric power was applied. Much of the work about an American furnace can be done by men oven fifty as well as by men one-half that age—an important, interesting and hopeful fact to many who are trying to face the world after youth's brightest flowers and ambitions faded. Brute strength, or ability to wheel heavy loads, is no longer the main qualification for effective work in a steel or iron plant. Judgment, education, a sense of responsibility, loyalty to work, and an interest in the valuable machinery which a man has in charge, count more, today, than strength, and it is all due to the inventive talent of the country, which has done so much for labor-saving machinery.—Success.

PREVENTION OF BOILER SCALE.

Coating the inside of steam boilers with graphite, is recommended by the Brunner Monat. fuer Textile-Ind., as an excellent means of preventing the formation of scale without injury to the boiler.—Textile World.

Trade Report.

BRADSTREET'S ON IRON AND STEEL SITUATION.

The editor of Bradstreets telegraphs us this advance report on the iron and steel situation:

Summer dullness and the strike dominate the iron trade but the active demand for finished products such as tin-plates iron and steel bars, hoops and sheets is reducing jobbers' stocks rapidly and causing high premiums such as $18 on sheets and $20 on tin-plate, $5 on hoops and $2 per ton on bar iron and skelp at Pittsburg, where a heavy business has been booked for structural material. Chicago reports sales of 15,000 tons of bars, sheets scarce and numerous small orders for steel from far-off markets. Pig iron production continues large and while stocks are reported accumulating in the central west, Chicago reports shipments so free that stocks are no larger. No prices have formally been fixed for steel rails, but some business has been placed for next year at $28.

WIRE NAILS.

Wire nails in carload lots are quoted at $2.45 with small lots at $2.55.

CUT NAILS.

No change is noted in the cut nail market. Small lots from stock are in very fair demand, considering the season, at $2.35.

BARB WIRE.

The demand for barb wire keeps up unusually late in the season. Carload lots of painted are $2.75 and smaller quantities are $2.85. Galvanized barb wire is $3.05 in carload lots, and $3.15 in smaller lots.

ROPE.

Manila rope, 7-16 and larger is 9½ to 10½c. Sisal rope is 7c to 7¼c.

GLASS.

Jobbers are carrying moderate quantities of stocks. Carload lots are 85 and 5 per cent, and smaller quantities are 80 and 20 per cent off.

WHITE LEAD IN OIL.

White lead paint in oil in lots of 500 lbs. and over is 6½c per lb. In smaller lots it is 7c per lb.

LINSEED OIL.

The high prices for linseed oil remain in force. City raw is 82c per gallon in lots of 5 barrels or more, and 83c per gallon in lots of less than 5 barrels. State and western raw oil is 80c to 81c, according to quantity, and Calcutta raw oil is 85c per gallon.

SPIRITS TURPENTINE.

There is very little activity in the spirits of turpentine market, and orders, as a rule, run very small. Southerns are 36½c to 37c and machine made barrels are 37c to 37½c per gallon.

MERCHANT STEEL.

A continued good trade is reported in this line, several good-sized contracts with the implement trade having been closed. Prices are firm, and if strike conditions continue, it is said prices are likely to advance. Our quotations for mill shipments, Chicago delivery, are: Smooth finished tire steel, 1.90c to 2c; open-hearth spring steel, 2.50c to 2.75c; toe calk, 2.40c to 2.60c; sleigh shoe, 1.85c to 1.90c; cutter shoe, 2.40c to 2.60c; ordinary tool steel, 6c to 7c; specials, 13c and upwards. Cold rolled shafting, carload lot, 55 per cent and upwards.

PLATES.

The demand for this material in the last few weeks has received a marked impetus, being far in advance of that of preceding weeks. The local mill made a scale of 4,000 tons last week. Quotations follow: Tank steel, 1.75c; flange steel, 1.90c to 2c; marine steel, 1.95c; firebox steel, ordinary, 2c to 2.10c; firebox, special, 2.25c and upwards. Tank steel from store, 1.90c to 2c; flange steel from store, 2c to 2.10c.

TIN.

There was little doing and the market closed dull and somewhat weak at 27⅞@28c asked for spot tin. Powell cables the Straits shipments for the first half of July as follows: To the United States, 700 tons; to the United Kingdom, 1,400 tons; to the Continent, 60 tons; a total of 2,160 tons, as against 1,290 tons for the same period of last year. The Singapore quotation declined from £119 to £117 5s per ton c. i. f. London. The English market was firm but very quiet. Spot tin advanced 7s 6d and futures declined 15s per ton.

SPELTER.

Spelter was lifeless. Prices were nominally unchanged at 3.95c asked for spot to September. In London there was an advance of 5s per ton to £16 15s. St. Louis reported a quiet market at 3.80c. Exports from this port, 1,695 tons zinc ore to Rotterdam. A mail report from London received at the New York Metal Exchange read: "Some business was done in virgin spelter at £16 10s, London terms, at the beginning of the week, since which the tone has been a little firmer and today's value is about £16 12s 6d; the general situation is unchanged. Zinc sheets are rather dull, but full prices are maintained. Remelted spelter is again getting scarce, and virgin having fallen the difference between the two is slight. Hard spelter is almost dead; producers do not yet realize that the demand for prompt delivery, which enabled such high prices to be paid, is over. Business has been done at £13 to £13 5s f. o. b., but consumers will not buy at all."

Quotations.

METALS.

FIRST QUALITY BRIGHT PLATES.

			Per Box.
IC	10x14		$8 25
IX	10x14		10 00
IC	12x12		8 25
IX	12x12		10 00
IC	14x20		8 25
IX	14x20		10 25
IXX	14x20		11 25
IXXX	14x20		12 75
IXXXX	14x20		14 25
IC	20x28		16 50
IX	20x28		19 50
IXX	20x28		22 50

COKE PLATES.

Cokes, 180 lbs	IC	20x28	10 20
Cokes, 200 lbs	IC	20x28	10 50
Cokes, 216 lbs	IC	20x28	10 80
Cokes, 216 lbs	IX	20x28	12 75

PIG IRON.

Lake Sup. Charcoal	$17 50@$18 00
Local Coke Fdy No. 1	16 00@ 16 50
Local Coke Fdy No. 2	15 50@ 16 00
Local Coke Fdy No. 3	15 00@ 15 50
Local Scotch Fdy No. 1	16 00@ 16 50
Local Scotch Fdy No. 2	15 50@ 16 00
Local Scotch Fdy No. 3	15 00@ 15 50
Southern Coke No. 1	15 15@ 15 65
Southern Coke No. 2	14 65@ 15 15
Southern Coke No. 3	14 15@ 14 65
Southern Coke No. 4	13 90@ 14 15
Southern No. 1 Soft	15 40@ 15 55
Southern No. 2 Soft	14 90@ 15 15
Southern Silveries	15 45@ 15 50
Jackson Co. Silveries	17 00@ 17 50
Ohio Strong Softeners	16 50@ 17 00
Alabama Car Wheel	21 00@ 22 05
Malleable Bessemer	16 00@ 17 00
Coke Bessemer	17 50@ 18 50

BLACK SHEET STEEL.

¼ in. 3-16 in. Nos. 8 and 10	per lb.	$3 40
No. 12	per lb.	3 45
No. 14	per lb.	3 50
No. 16 and 18	per lb.	3 55
No. 20, 22, 24, 25 and 26	per lb.	3 50
No. 27	per lb.	3 60
No. 28	per lb.	3 70

SMOOTH STEEL.

		per lb.
Wood's Smooth Steel,	15-17	$3 35
" " "	18	3 45
" " "	20	3 55
" " "	22-24	3 65
" " "	25-26	3 75
" " "	27	3 85
" " "	28	3 95

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. "A" $10 20, "B" $9 20

GALVANIZED IRON.

Galvanized Iron ..... 65&10%

SOLDER.

Extra 20½c

Commercial 19c

SHEET ZINC.

600 lb. Casks, base ..... 7¼c per lb.

COPPER.

Copper ..... base, 21c

HARDWARE.

QUOTATIONS.

(The quotations given below represent the current hardware prices. They are not given as manufacturer's prices, and manufacturers should not be held responsible for them. Manufacturers sometimes name high figures than those quoted for goods; they are not always selling at the price quoted, but goods are being sold at the figures printed below by manufacturers and jobbers.)

ADZES—CARPENTERS'.

Hunt's	25%
White's	12½%
Coopers'—Barton's	12½%
White's	12½%
Ship—Barton's	12½%
White's	15%
Hunt's	25%

AGATE NICKEL STEEL WARE.

Agate Nickel Steel Ware ..... 35&10%

AMMUNITION

CAPS, PERCUSSION—per 1000—

F L Waterproof, 1-10s	50c
G D	40c
Eley's	52c

CARTRIDGES.

Peters Rim Fire Ctgs	50&3%
Peters Cent Fire, Pistol & Rifle	25&3%
Peters Cent Fire, Military and Sporting Ctgs	15&5%
Peters Blank Ctgs, except 22 and 32, an additional 10% from above discount.	
Peters Blank Ctgs. 22 cal	10&10%
Peters Blank Ctgs. 32 cal	10&10%
Peters B B Caps, Round ball	$1 18
Peters B B Caps, Conical ball	$1 90
U. M. C. Rim Fire Ctgs	50&3%
U.M.C. Cent. Fire, Pistol & Rifle	25&3%
Winchester Cent. Fire, Military and Sporting Ctgs	15&8%
U. M. C. Blank Ctgs. 22 & 32 cal.	10%
U. M. C. Blank Ctgs. 38 cal	50-10-10%
U. M. C. B B Caps, Round Ball	$1 75 25&10%
U.M.C. B B Caps, Con. Ball	$2 00 net
U. M. C. Rim Fire Shot Ctgs	50&15&5%
U. M. C. Cent. " " "	25&10&3%

PRIMERS.

Berdan Primers	$1 00
Peters Primers	1 10
U. M. C. Primers	1 08
Winchester Primers	1 08

SHELLS.

Peters Empty Paper Shells, 10 and 12 gauge. League	25&5%
Peters Empty Paper Shells, 16 gauge. League	20&5%
Peters New Victor Nitro shells	15%
Ideal	33⅓&10%
Peters Loaded Shells. League and Semi-Smokeless	40&5%
Peters New Victor Loaded Shells, with King's Smokeless	40&10&10%
Ideals Loaded with Kings Smokeless	40&10&10&5%
U. M. C, New Club, 16 guage	20&10%
U. M. C. New Club 10 & 12 gauge	33⅓&5%
U. M. C. New Club	33⅓&5%
U. M. C. Nitro	18%
U. M. C. High Base	18%
U. M. C. Trap	33⅓&10&7%
Winchester Blue Rivals	20%
Winchester Yellow Rivals	20%
Winchester Repeater	18%
Winchester Leader	33⅓&10&7%
U. M. C. Loaded Shells. Black Powder	40&5%
Winchester Loaded Shells, Black Powder	40&5%
U. M. C. Smokeless	40&10&10&5%
Winchester Smokeless	40&10&10&5%

GUN WADS—per 1000.

Peters Gun Wads	20&5%
U. M. C. Gun Wads	20&5%

POWDER.

King's Quickshot Powder; Kegs $4 00; ½ kegs $2 25; ¼ kegs $1 25.

King's Semi-Smokeless	20&5%
King's Smokeless	25, 20&10%

Austin Quickshot Powder. Kegs $4 00; ½ kegs $2 25; ¼ kegs $1 25.

Dupont Smokeless, Sporting	25, 20&10&10c

SHOT.

Drop shot, sizes smaller than B, 25-lb bags, per bag	$1 35
Drop shot, B and larger sizes, 25-lb bags, per bag	1 60
Buck Shot, 25-lb bags, per bag	1 60
Chilled Shot, 25-lb bags, per bag	1 60

ANVILS.

Hay-Budden, 70 to 84 lbs	10c per lb
Hay-Budden, 85 to 150 lbs	9c per lb

AUGERS AND BITS.

Snell's Boring Mach. Augers	60&10&5%
Snell's Car Bits, 12-inch twist	40%
Jennings' Pattern Auger Bits	50&10%
Russell Jennings' Augers and Bits	25&10%
Ship Augers, L'Hommedieu Bits	15%
Irwin	50%
Climax Bits	60&10%

AWLS.

Brad, handled	per doz. $ 35
Brad, shouldered, assorted 1 to 4	per gr. 2 00
Brad, shouldered, assorted 1 to 6	per gr. 2 50
Peg, Pat	per gr. 60
Peg, shouldered	per gr. 1 00
No. 1, Scratch, handled	per gr. 4 80
No. 5, Scratch, socket	per doz. 6 00

AXES.

Lippincott	per doz	6 50
Mann	"	6 50
Second quality	"	6 00
Beveled axes, add	"	50
Broad—		
Peerless can patt	"	28 50
Hunt's	"	30
White's	"	12%
Hand—		
Hunt's	"	40
White's	"	12%
Ship—		
White's	"	12%

AXLES.

Common iron, long arm, sq. bed	5¼
Concord iron. long arm, sq. bed	6¼
Concord express, long arm, steel, square bed	6¾
Coach shape on above, ex. per. lb.	⅛
Short arms on above, extra per lb.	2
Welded axles on above, ex. per. lb	1½
Half Patent, steel, Nos. 7 to 14	70
Half Patent. steel, Nos. 19 to 22	70
Extra, coach shape, 1¼ & smaller	per set 15
Extra, coach shape, 1¼ 1½, per. set	30
Extra, coach shape, l'g'r, per. set	$1 00
National Wrought Steel Tubular, Self Oiling—	
Standard Farm (1 to 5) and Special Farm (A1 to A5) less than ten sets	20%
Over ten sets	25

BEAMS—SCALE.

Scale Beams, List Jan. 12, 82	35%
Frary's	40%
P. S. & W.	30%

BELLOWS.

Blacksmiths	70%
Hand, 6½ in	per doz. $4 50
Molders', 10 in	per doz. 9 00

BELLS.

COW.

Ordinary Goods	70&10%
High Grade	60&10%
Jersey	75&10%
Texas Star	50&10%

DOOR.

Abbe's Gong	45%
Barton Gong	55%
Home, R. & E. Mfg. Co.'s	55&10%
Lever and Pull, Sargent's	20&10&10%

HAND.

Hand Bells, Polished	60@60&10%
White Metal	55@55&10%
Nickel Plated	50@50&10%
Swiss	60%
Silver Chime	33⅓@33⅓&10%

MISCELLANEOUS.

Farm Bells	lb. 2¼ to 2½c
Steel Alloy, Church and School	50&10&5@60%
Wilmot & Hobbs Mfg. Co., Gongs	70%

BIT STOCK DRILLS.

Standard List ..... 60@60&5%

BLOCKS.

Common Wooden	70%
Eddy Steel Tackle Blocks	66⅔&5%

BOLTS.

CARRIAGE, MACHINE, ETC.

Common, list Jan. 30, 95	65&05%
Norway Iron, $3.00, list Oct. 7, '84	75&10%
Bolt Ends, list Jan. 30, '95	50&10%
Machine, list Sept. 20, '99	65&10%

DOOR AND SHUTTER.

Ives' Patent Door	60%
Wrought Barrel, Standard list	75&10%
Wrought Flush	40&10%
Wrought Square, Standard list	65%

STOVE AND PLOW.

Plow	40&10%
Stove, list December 28, 1899	70 to 70&10%

TIRE

Common, list Dec. 28, '99	70
Eagle Philadelphia	72½%
Norway	75%

BORING MACHINES.

Jenning upright without Augers..$2

BOXWOOD RULES.

No. 4	$11 00	per doz
" 12	16 00	"
" 18	6 00	"
" 26	11 00	"
" 27	13 00	"
" 29	4 50	"
" 66	10 00	"
" 66½	10 00	"
" 67	6 00	"

Boxwood	80&10%
Ivory	40&10%
Lufkin's Steel	50&10%

BRACES.

Barber's	50&10%
Common Ball, American	$1 50
Fray's Genuine Spofford's	60%
Fray's No. 307 to 322	40&5%
Fray's No. 508 to 522	50%

BRACKETS.

Cast Iron Plain	50&10%
Wrought Steel	70&10@ 75%
Bradley's	75 @ 75&10%

BROILERS.

Wire Goods Co. 75%

BUTTS.

Bright Butts, Nos. 800, 802, 804, 806, 808, 810, 814, 816, 818, 820, 854	70%
Bright Butts, Nos. 826, 828, 829, 830, 832, 834, 836, 838, 840, 842, 843, 844, 845, 846, 848	70%
Bright Butts, Nos. 822, 822½, 823, 823½	70%
Japanned Butts, Nos. 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 726, 727, 728, 729, 730, 731	70%

CAGES—BIRD.

Enameled	40%
Brass 1200 series	33⅓%

CASTERS.

Bed	60&10&5%
Plate Casters	60&10&5%
Martin's Patent (Phoenix)	50&5%

CEMENT.

Asbestos Furnace Cement, 5 and 1 lb. Cans.
Per lb. 5c

CHAIN.

American Coil, Cask lots:

3-16	¼	5-16	⅜	7-16	½	9-16
7.45	5.55	4.55	3.70	3.55	3.45	3.40

⅝ ¾ ⅞ to 1 1⅛ to 1¼ inch
3.40 3.35 3.35c. per lb. 3.60 per 100 lbs
Less than Cask lots add 25c.

German Coil, list July 24, '97	60&10&10%
German Halter Chain, list July 24, '97	60&10&10%

Traces, Western Standard: 100 pair

6½—6-3, Straight, with ring	$26.00
6½—6-2, Straight, with ring	27 00
6½—8-2. Straight, with ring	31.00
6½—10-2, Straight, with ring	34.50

Add 2c per pair for Hooks.
Twist Traces 2c. per pair higher than Straight Link.

Trace, Wagonand Fancy Chains Eastern list	60@60&5%
Jack Chain, lis July 10, '93	
Iron	60@60&10
Brass	60@60&10

Safety Chain.....70@70&10%
Gal. Pump Chain.....lb. 4½@4¾c
Covert Sad. Works:
Breast, Hitching and Rein Chains.....50%
Covert Mfg. Co.:
Breast.....35&2%
Halter.....35&2%
Heel.....35&2%
Rein.....35&2%
Stallion.....35&2%
Oneida Community:
Eureka Coil and Halter...60@60&5%
Niagara Coil and Halters.60@60&5%
Niagara Cow Ties..45&5@45&10&5%
Am. Coil and Halters..50&10&5@60%
Am. Cow Ties.....35&5@40&5%
Wire Goods Co.:
Dog Chain.....60&10%
Universal Dbl-Jointed Chain 50%

CHALK.

Blue.....per gross 60c
Red..... " 50c
White..... " 45c

CHALK LINES.

Chalk lines.....per doz. $2 50

CHISELS.

Mix..... } 70&5 to 70&10%
Witherby..... }

CHISELS.

Box.....20%
Tinners.....40%
Cold, per lb.. regular qual.....20%
Cold, per lb., special qual.....32%
Corner.....662⅔%
Firmer, American..... 20, 10&10%
Barton's.....20%
Butcher's.....40&10%
Mortice, Butcher's.....40&10%
Socket, Firmer.....70%
Framing.....70%
Turning, Barton's.....20%
Butcher's.....50%
Beveled.....20%

CLAMPS.

No. 25 Adjustable.....50&10 to 60%
Carriage Makers..... 50&10&5%

CLEANERS.

Pot.....per doz $1 10

CLEAVERS.

Beatty's.....dis 40
White's..... " 15

CLIPPERS.

E. H. Hotchkiss Horse Clippers
No. 10.....per doz $18 00
No. 80..... " 15 60
No. 22..... " 13 80
No 20..... " 13 20
No. 8..... " 10 80
H. Hotchkiss Toilet Clippers
No. 1.....per doz 9 60
No. 101..... " 10 80
No. 201..... " 10 80
No. 300..... " 13 20
No. 500..... " 15 00

COFFEE MILLS.

Enter. Mfg. Co., list Jan. 17, '99....25%
Parker's.....50&10%
Arcade.....60&10%

CORKSCREWS.

Howes..... 25 & 22%
Humason & Beckley..... 40 & 10%
Empire..... 40%
Walker's..... net
Williamson's Regular..... 40%
Williamson's Forged Worm 40%

DOG COLLARS.

Pope & Stevens' List:
Brass (full Assortment).....net price

DOOR CHECKS.

Blount.....30%
Eclipse.....30%
Corbin.....30%

DRILLS AND DRILL STOCK.

Common Blacksmith's Drill .....$1 50@$1 60
Bench Drills, Stearns' .... 5 50& 6 00
Blacksmith's Self-feeding, each, ...$5 00&$7 00
Breast, Millers Falls, each...$3 00 20%
Godell Automatic Drills, $12 00to$15 00

EGG BEATERS.

Standard Co.:
No. 5 Steel Handle Dover per gross.....$ 6 50
No. 10 Cast Handle Dover pr gr 8 00
No. 10 Steel H'ndle Dov'r pr gr 8 00
No. 15 Extra Heavy Steel Handle per gr..... 15 00
Rival per gr..... 10 00
Taplin Mfg Co.:
No. 50 Small Family size pr gr 6 50
No. 100 Regular Fam size pr gr 8 00
No. 102 Regular Family size tinned pr gr..... 9 50
No. 150 Large Fam size pr gr.. 15 00
No. 152 Large Family size tinned pr gr..... 17 00
Lyon's Standard size per doz.. 1 75
Wonder (S. S. & Co.) per gr.... 7 50

FASTENERS, BLIND.

Zimmerman's.....50&10%

FAUCETS.

Standard Metal Key.....25%
B. & L. B. Co.
Redlich's Wood Faucets.
Red Cedar ..... } Net Prices.
Oak..... }
Cherry..... }
Cork Lined..... }
Metal Key..... }
Self Measuring:
Enterprise, per doz. $36 00.....40%
Cork Lined..... 70&5@70&10&5%
Metallic Key, Leather Lined .....70@70&10%
Red Cedar..... .....50@50&5%
B. & L. B. Co.:
West's Lock, Open and Shut Key..... 50&10%
John Sommer's Peerless Tin Key..40%
" " Boss Tin Key 50%
" " Victor Metal Key 50&10%
" " Duplex Metal Key....60%
" " Diamond Lock..... 40%
" " I X L Cork Lined ...50%
" " Reliable " " ..50&10%
" " Common " " 70%
" " Chicago " " 60%
" " O K " " 50%
" " Perfection Cedar..... 40%
Star.....60@60&5%
Star, Metal Plug new list... 40@40&5%
Lockport, Metal Plug, reduced list.....60&5%
McKenna, Brass:
Burglar Proof, N. P.....35%
Improved, ¾ and ⅞ inch.....35%
Self Measuring:
Enterprise, per doz $36.00.....40%
Lane's, per doz. $36.00.....40&10%
National Measuring, per doz $36.00.....40%

FILES—Domestic.

New List, Nov. 1, '99:
Black Diamond.....70&10%
Disston's.....75& 5%

Imported.

Stubs list.....5%

FORKS AND HOES.

Coke and Cottonseed Forks....40&5%
Coal Forks.....40&5%
Barn or Ice Forks.....40&5%
Beet Forks.....30&10
Ballast or Stone Forks.....40&5%
Tanners' Forks.....40&5%
Shaving Forks.....40&5%
Potato Scoop Forks.....40%
Oyster Forks.....40&5%
Sluice Forks.....40&5%
Heavy Mill, Manure or Street Forks.....70%
Steel Tar or Asphalt Rakes.....65%
Asphalt Hoes.....65%
Two Tine Hay Forks, Std. Size...65%
3 Tine Hay Forks, Std. Size..60&16⅔%
Four Tine Hay Fork, Std. Size 66⅔%
Socket Four Tine Hay Forks..66⅔&5%
Socket Four Tine Manure Forks...70%
Socket Four Tine Spading Forks .....70&5&5&2½%
Three Tine Hay Header and Baler Forks.....67½&2½%
Four Tine Hay Header and Baler Forks.....66⅔%
Grain or Barley Forks.....70&6%
Four Tine Manure Forks.....70%
Five & Six Tine Manure Forks.....70%
Spading Forks.....70&2½%
Potato Digging Forks.....65%
Stone Picking Forks.....65%
Garden Hoes.....75%
Meadow and R. I. Hoes...75&5&2½%
Sunbeam Meadow Hoes.....75&5&½%
Mortar and Street Hoes.....75&2%
Planter Hoes, Regular Pattern.70&30%
Tobacco Hoes.....75&20%
Cotton Hoes.....70&10&10&5&2%
Rough Fin. Shank Cot. Hoes 75&12½%
Cotton Chopper Hoes....75&10&7½%
Ladies' Cotton Hoes.....75&10&7½%
Malleable Rakes.....70@70&10%
Toy Ladies' and Boys' Hoes.....70&10to70&10&5%
Weeding Hoes and Rakes...70@70&5%
Potato Hooks.....65to65&10%
Hop Hooks.....60&10&2½%
Steel Garden Rakes.....70&2%
Steel Garden Rakes Stamped blank 70%
Turf Edgers.....60&5%
Steel Road Rakes..... ..... 65%
Special Mortar Hoes.....40&10&2½%
Harpers' No. 7 Mortar Hoes.... ..65%
Truck Hoes.....50&10&2%
Hoes.....65%
Special Hoes.....75&'0&2%
Hoe Down Hooks.....75&10&2%
Warren Hoes.....50&10&7½%
Laid Steel Edge Hoes.....25, 5&2%

GAUGES.

Marking, Mortise, etc.....60%
Stanley R. & L. Co.'s Butt & Rabbet Gauge.... .....Net
S. & H. Cos.....75%

GIMLETS.

Gimlets.....60%

GLASS CUTTERS

Woodward.....33⅓&10%
Red Devil.....33⅓&10%

GLUE POTS.

Tinned.....30%
Enameled.....35%

GLUE.

Martin's Liquid, List....33⅓% off List
Martin's Liquid, List....33⅓% off List
Martin's Liquid, List....33⅓% off List

GREASE, AXLE.

Fraser's.....Ne
Baum's Castorine.....Net

GRINDSTONE FIXTURES.

Stowell's..... Net
Reading Hardware Co.....Net

HAMMERS.

"Artisan's Choice" A. E. Nail.40&10%
Engineer's and B. S. Hand.....60%
Machinist's Hammers.....60%
Bell Face, A. E. Nail.....50
S. & H. Cos. No. 20 ....per gross. 5 25

HANDLES—IRON, WROUGHT OR CAST—DOOR OR THUMB.

No. 0.....per doz $0 90 } Dis. 50
No. 1..... " 1 00
No. 2..... " 1 18
No. 3..... " 1 35
No. 4..... " 1 50
Bronze iron drop lat., per doz net $1 10
Japanned store door.....net 1 10
Barn door No. 5..... " 1 35
Chest and lift.....dis 50
Wood—
Saw and plane..... " 45
Hammer, hatchet, axe, etc.... " 45
Brad awl.....per gro. 45
Hickory firmer chisel..... } 25
Apple firmer chisel..... }
Socket firmer chisel..... }
Socket framing chisel..... }
File.....per gro. $2 80
Auger, assorted..... 5 00
Hoe, rake, shovel, etc..... 50
Cross Cut Saw—
Atkins' No. 1.....per pair 28
" No. 3..... " 18
" No. 6..... " 12
Triumph..... " 12
Common loop..... " 10

HANGERS.

Chicago Spring Butt Co.:
Friction.....25%
Oscillating.....25%
Big Twin.....25%
Cronk Hanger Co.:
Loose Axle..... .....60%
Roller Bearing.....60&10%
Lane Bros.:
Parlor, Ball Bearing $4.00
Parlor, Standard 3.25
Parlor, New Model 2.75
Parlor, New Champion..... 2.40
Barn Door, Standard .....60&10%
Covered .....50&10&10&5%
Special .....60&10%
Lawrence Bros.:
Advance.....60%
Cleveland .....60&10%
Crown.....60%
New York.....60%
Peerless.....60&10%
Sterling 60%
McKinney Mfg. Co.:
No. 2, Standard, $18.....60&10%
No. 1, Special, $13.....60&10%
Stowell Mfg. and Foundry Co.:
Acme Parlor Ball Bearing 40%
Atlas.....50&10%
Badger Barn Door.....50%
Baggage Car Door.....50%
Climax Anti-Friction.....50%
Elevator 40%
Express.....50%
Interstate .....50&10%
Lundy Parlor Door.....50%
Matchless.....50&10%
Nansen.....60&10%
Stowell Parlor Door 50%
Railroad 50%
Street Car Door.....50%
Steel, Nos. 300, 404, 500.....40&15%
Wild West..... ..... 50%
Zenith for Wood Track 50%
Taylor & Boggis Foundry Co.:
Kidder's .....50@50&10%
Wilcox Mfg Co:
Bike Roller Bearing .....60&10%
C. J. Roller Bearing.....60&10%
Cycle Ball Bearing.....50%
Dwarf Ball Bearing.....40%
Ives, Wood Track.....60&10%
L. T Roller Bearing.....60&10&5%
New Era Roller Bearing .....50&10%
O. K. Roller Bearing.....60&10&5%
Prindle, Wood Track 60%
Richards' Wood Track 60%
Richards' Steel Track .....50&10%
Spencer Roller Bearing.....60&10%
Tandems, Nos. 1 and 2..... 60%
Underwriters' Roller Bearing....40%
Wilcox Auditorium Ball Bearing 20%
Wilcox Barn Trolley No. 123 ....40%
Wilcox Fire Trolley, Roller Bearing 30%
Wilcox Le Roy Noiseless Ball Bearing 40%
Wilcox New Century ....50&10&10%
Wilcox Trolley Ball Bearing.....40%

HATCHETS.

American Axe and Tool Co..... }
Blood's..... }
Hunt's..... }
Hurd's..... } 40&10%to40&10 &5%
Mann's..... }
Underhill's..... }
C. Hammond & Son.. }
Fayette R. Plumb.... }

HAY AND STRAW KNIVES.

Lightning.....$6 50&$7 00

HINGES.

BLIND AND SHUTTER.

Surface Gravity Locking Blind:
(Victor; National; 1868 O.P.; Niagara; Clark's O. P.; Clark's Tip; Buffalo.)
No.....1 3 5
Doz pair.....$0.75 1.45 2.90
Mortise Shutter:
(L. & P., O. S., Dixie &c.)
No.....1 1½ 2 2½
Doz. pair.....$0.60 55 52 45
Mortise Reversible Shutter, (Buffalo, &c.)
No.....1 1½ 2
Doz. pair.....$0.65 .60 .55
Parker.....70@75%
North's Automatic Blind Fixtures, No 2, for Wood $9.00; No. 3, for Brick $11.50.....10%
Reading's Gravity.....75&10%
Sargent's, No. 1, 3, 5.....66⅔&10%
Sargent's Nos. 11 & 13.....70&10%
Wrightsvile H'dware Co.:
O. S., Lull & Porter.....80&2½%
Acme, Lull & Porter.....75&10%
Queen City Reversible.....75&10%
Stenger's Positive Locking, Nos 1 & 3.....70&10&5%
Shepard's Noiseless, Nos. 60, 65, 55 70&10%
Niagara, Gravity Locking, Nos 1, 3 & 5.....75&7½%
1868, Old Pat'n. Nos. 1, 3 & 5 75&7½%
Tip Pat'n, Nos 1, 3 & 5.....75&7½%
Buff. Gravity Lock., 1, 3, 5..75&7½%
Shepard's Double Locking, Nos. 20 & 25.....70&10%
Champion Gravity Locking, No 75 75&7½%
Steamboat Gravity Locking, No 10 5&7½%
Pioneer, Nos 060, 45 & 5½..75&7½%
Empire, Nos. 101 & 103.....70&7½%
W. H. Co's Mortise Gravity Locking No. 2.....60&10%
Stanley's Steel Gravity Blind Hinges, per doz. sets $1.30.....30&10%

GATE.

Clark's or Shepard's—Doz. sets:
No.....1 2 3
Hinges with Latches$1.90 2.50 3.85

Hinges only..... 1.80 1.90 2.90
Latches only..... 65 65 95
New England:
With Latch.....doz....@$1.55
Without Latch.....doz....@$1.25
Reversible Self-Closing:
With Latch.....doz....@$1.80
Without Latch.....doz ...@$1.45
Western:
With Latch.....doz. $1.40@1.75
Without Latch.....doz. $0.95@1.30
Wrightsville H'dware Co.:
Shepard's or Clark's Nos. 1 & 2... 65&2½%
Shepard's or Clark's, No. 3....55&5%

SPRING

Holdback, Cast Iron, gros. $8.00@8.25
Non-Holdback, Cast Iron.... ... gro.$6.75@7.25
Extra 10% often given on most of these hinges.
J. Bardsley:
Bardsley's Patent Checking 15%
Bommer Bros.:
Bommer Spring Hinges 40%
Bommer Ball Bear. Floor Hinges.40%
Chicago Spring Butt Co.:
Chicago 20%
Floor Hinge.....40%
Garden City Engine House.....20%
Keene's Saloon Door 20%
Triple End.....40c
Hoffman Hinge & Foundry Co.:
No. 70 & 80 Holdback Detachable $8.50
Lawson Mfg. Co.:
Matchless 30%
Matchles Pivot.....35%
Payson Mfg. Co.:
Oblique.....50&10%
Stover Mfg. Co.:
Ideal, No. 16, Detachable, per gr. $12.50
Ideal, No. 4 .....per gr. $9 00
New Idea No 1.....per gr. $9 00
New Idea, Double Acting.....45%

WROUGHT IRON

Strapand T Hinges, list Mar. 15, 1901:
Light Strap Hinges.....75%
Heavy Strap Hinges.....80%
Light T Hinges.....70%
Heavy T Hinges.....66⅔%
Extra Heavy Hinges.....75&10%
Hinge Hasps..... .....60%
Cor, Heavy Strap..... 80%
Cor. Ex. Heavy T.....75&10%
Screw Hook and Strap:
6 to 12 in.....lb. 3¼c
14 to 20 in.....lb. 3¼c
22 to 36 in.....lb. 3 c
Screw Hook and Eye:
¾ to 1 inch.....lb. 5c
⅝-inch.....lb. 6c
½-inch.....lb. 7c

MISCELLANEOUS—

Hoffman's Steel Spring Butt Hinges 40&10%
Hoffman's OffsetRefrigeratorHinges 40&10%

HOLLOWWARE.

Stove Hollowware Ground.....50%
Maalin Kettles.....70&10%

HOOKS.

Picture, No. 299 ....&28c

BUSH HOOK.

No. 1. Underhill $9 00
Bird cage 40%
Clothes line .....60&10&10%
Grapling.....50%
Ceiling.....60&5%
Coat and Hat ..... 60&5%
Harness .....60&10&10%

WROUGHT IRON.

Cotton, V. & B.....25%
Tassel and picture.....50%
Wire, Coat and Hat, Gem.....net
Indestructible..... 45%
Brass .....net $2 0 %
Hooks and eyes, bright wire....80&10%
Brass.....60&10&5
Fish hooks, American.....50%

HOSE—RUBBER.

Competition.....dis 70&10%
Standard 70%
Extra 60%
N. Y. Rubber Co.'s st'd.....50&10%
Banner.....60%
Extra..... 50%

IRONS—SAD AND POLISHING.

Mrs. Potts' No. 50.....70c
Mrs. Potts' No. 55.....70c
Mrs. Potts' No. 60.....90c
Mrs. Potts' No. 65..... 95c

KNIVES.

Standard List.....70&5%
Adjustable Handle.....25@33⅓%
Watrous.....80&10@40%
Cantelo's Folding.....25%
Improved Crown.....20%

KNOBS.

Base, 2½in. Birch Rubber tip ℔ gro.....$1 40
Door, Mineral.....℔ doz. 65c
Door, Por. Jap'd.....℔ doz. 75c

LADLES.

Reading.....Net
Sargent's.....Net

LANTERNS—TUBULAR.

No. 0 Berger's "Bail Lift," per doz. $9 50.....40&10%
No, 0, Berger s "Bail Lift," Galvanized, per doz. $10 50...40&10%
No. 2 Berger's "Bail Lift," per doz. $13 00.. .....40&10%
No. 2 Berger's "Cold Blast," per doz. $16 00.....40&10%
No. 0 Berger's Dash Board, Japaned, Plain Globe, per doz. $13 00.....40&10%
No. 0, Berger's Dash Board, Japanned, Bull's Eye, per doz. $13 50.....40&10%
No 2, Berger's Dash Board, Japanned, Plain Globe, per doz. $17 00 .....40&10%
No. 2, Berger's Dash Board, Japanned, Bull's Eye, per doz. $17 50.....40&10%

BULL'S EYE POLICE.

2¾-in. flash light, per doz.$3 50@$3 75
3-in. flash light, per doz. ..4 00@ 4 25
4¾-in. regular, per doz.....3 50
3-in. regular, per doz.....3 57

LEMON SQUEEZERS.

Wood, Common, per gr., No. 0 $5 00; No. 1 $6 50; No. 2 $10 00.

Wood, Porcelain lined, No. 1.....per doz. $3 00@$3 50
Tinned Iron.....per doz. 1 25
Iron, Porcelain Lined, per doz.....3 25@ 3 50
Jenning's Star...per doz. 1 85@ 1 90
King.....per doz.

LOCKS.

Plate 33⅓%
Slaymaker-Barry Co..... 30&35%
Sargent & Co..... 40, 40&10%
Yale flat key.....net
L. & C, round key.....40&10%
Reading Harding Co.....40%
L & C. flat key latches .....33&10%
Stearns' sliding door....net $15 00

CABINET.

Eagle.....33⅓%
Yale.....33⅓%
Eagle and Corbin trunk.....25%

PADLOCKS.

Wilcock's..... 70%
M. W. & Co..... 70%
Russell & Irwin 70%
Slaymaker Barry Co..... 40%
Bohannon's brass..... 30%
Yale.....net
Eagle 33⅓%
Eureka, Eagle Lock Co 40%
Corbin.....33⅓&10%

MALLETS.

Fiber Head Sterns.....30&10%
Hickory.....40%
Lignumvitæ .....40&40&10%
Tinners'. Hickory and Applewood, per doz. .....75c@$1 50

MATTOCKS.

Regular list.....70%

MOWERS, LAWN.

Cheap.....all sizes, $2 00@$2 10
Good.....all sizes, $2 50@$2 75
10 12 14 16-in
High Grade....4.25 4.50 4.75 5.00
Pennsylvania and Continental .....Net price
Genuine Philadelphia Mowers:
Styles M. S., C., K., T.....70&10%
Style A, (all steel).....60&10%
Style E, Low Wheel.....60&10%
Style E., High Wheel.....70&10&5%
Drexel, low list.....60%
Gold Coins, low list.....60%
Dewey's.....Net prices
All Day .....Net prices

NAIL PULLERS.

Giant, No. 1..... per doz., $15 00. 40%
" No. 1½.... " 16 00. 40%
" No. 2..... 15 00. 40%

Ajax.....Net prices.
Diamond B.....per doz., $ 9 00
Pipe.....per doz., 12 00
Eureka.....per doz., 10 00

NAIL SETS.

Octagon..... per gross, $8 00@$9 00
Round..... per gross, 8 00@ 9 00
Cannon's Diamond Point, per gross .....$9 00 Net

NUT CRACKERS.

Sargent's No. 12.....$1 50

OILERS.

Tin or Steel.....50%
Zinc..... 50&10&5 to 60%
Malleable Hammers 35%
Malleable Hammers, old pat., same list .....Net

PADLOCKS.

Sargent Dog Collar 70%
Sargent Wrought Steel and Brass..80%

PINCHERS.

Carpenters', wrt. iron, pol. steel jaws..... 25%
Blacksmiths'..... 40%
P. S. & W..... 25%

PIPE.

WROUGHT.

List February, 1898.
1¼ and under, plain.....50&2½%
1½ and under, gal.....50&2½%
1¼ and over, plain.....50&2½%
1½ and over, gal..... 50&2½%
Boiler tubes..... 50&2½%

PLANES.

Stanley Planes, No. 100.....$.30 each
" " No. 130..... .85 each

PLIERS AND NIPPERS.

Swedish Side Cutting Pliers 40%
" End " " 40%
" Diagonal " " 40%
Halls Compound Nippers.....40%
U. D. F. & T. Co., all kinds.....Net

PLUMBS AND LEVELS.

Common.....75 to 75&5%
Disston's.....60%

POACHERS.

Buffalo Steam Egg No. 1, per doz. $7 20. 50%

POLISH.

POLISH—METAL.

U. S. Metal Polish Paste, 3 oz. boxes, per dozen, 50c; per gr. $4.50; ½lb boxes, per doz. $1.25; 1 lb boxes, per doz.....$ 2 25
U. S. Liquid, 3 oz. cans, per doz. $1.25; per gr..... 12 00
Barkeepers' Friend Metal Polish, per doz. $1.75, per gr..... 18 00
Universal Paste, 3 oz. boxes.....60%
Burnishine Liquid 5 lb..... 16 00

POLISH—STOVE.

Dixon's .....per gross, $5 75
Dixon's Plumbago.....per lb 6½c

POPPERS, CORN.

Round or Square, 1 qt....per doz., 65%
Square, 1½ qt.....per doz., $1 00
Square, 2 qt.....per doz., 1 00

POST HOLE AUGERS AND DIGGERS.

Iwan's Patent Post Hole Auger....40%
Eureka Perfection Post Hole Digger, per doz.....$10 00
Atlas, per doz..... .... 8 25

POWDER.

IN CANISTERS.

Duck, 1 lb each.....45c
Fine Sporting, 1 lb each.....75c
Rifle, 1 lb each..... ....$1 00

IN KEGS.

Duck, 6½ lb kegs.....$2 50
Rifle, 6¼ lb kegs..... ..... 1 25
Rifle, 12½lb kegs..... 2 25
Rifle, 25 lb kegs..... ..... 4 00

PRESSES — FRUIT AND JELLY

Enterprise Manufacturing Co.....25%

PULLEYS.

Hay Fork, Svl, Sd Eye, doz $1 75@$2 75
Hot House, Awning, etc.....50%
Japanned Clothes Line.....50%
Japanned Screw.....50&10%
Japanned Side..... .....50&10%
Sash (Auger Mortise):
Common Sense, 1¾ in ..per doz. 19c
Common Sense, 2 in ... per doz. 20c
Empire.... ....17c.; 2 in., 22c

SASH PULLEYS.

Fox No. 3 or No. 7, 2¼ wheel, ...25c per doz
Fox No. 9, 1¾ wheel.....20c per doz
Extra for plated Finish... 25c per doz
Extra for Anti-Friction Bronze Bushing.....10c per doz

RAZORS.

Fox Razors No. 42....per doz. $20
" " " 44.... " " 24 00
" " " 82..Platina " 24 00
Discount 40%
Rantankarus..... " 16 00

REGISTERS.

Black Japanned Registers, Ventilators, Faces and Borders, ...60 to 60&10%
White Japanned Registers, Ventilators and Faces.... ....50%
Bronzed Finishes in Imitation of Gold, Silver, Copper or Bronze .....40&10%
Nickelplated..... ....60%
Electro-Plated in Brass. Bronze, Copper or Oxidized Silver....40&10%
White Porcelain.....30%
Solid Brass and Bronze Metal.....20%

RIVETS AND BURRS.

Coppered Iron Rivets.....60&5%
Tinners Rivets.....60&5%

ROOFING SUPPLIES.

EAVE TROUGH.

"Perfection" Galvanized Eave Trough.....75&10%
"Eclipse" Galvanized Eave Trough..... .....75&10%
Double Bead Galvanized Slip Joint Eave Trough.....75&10%
Double Bead Galvanized Lap Joint Eave Trough.....75&10%

GUTTERS.

Roof Gutters, Galvanized.....75&10%

PIPE.

Plain Round Pipe, Galvanized, Nested.....60&20&2½%
Plain Round Pipe, Galvanized, Unnested.....60&20%

VALLEYS.

Valleys, in Rolls, IC and IX Terne.70%
Valleys, in Sheets, IC and IX Terne.....70%

HOOKS.

Flashing Hooks.....10%
Wrought Conductor Hooks.....60%

CUT-OFFS.

Kuehn's Galv.....60%
Acme Galv..... 10&10%
Acme Tin.....60&10%
Centennial Tin.....20%

EAVE TROUGH HANGERS.

Eave Trough Hangers, Single and Double Bead, Imperial.....10%
Eave Trough Hangers, Single and Double Bead, Wire.....

ELBOWS.

One Piece Conductor Elbows, Galvanized, Corrugated..... 60%
Adjustable Elbows, Tin, ...50%

PREPARED ROOFINGS.

Imperial 2-ply Tarred Roofing complete.....$1 75 per sq.
Imperial 3-ply Tarred Roofing, complete.....$2 00 per sq.

ROPE.

Per lb.
Manilla, 7-16 inch diameter and larger.....10½c " "
Manila, ⅜ in.....10¼c " "
Manila, ¼ and 5-16 in.....11½c " "
Sisal 7-16 in. and larger.....8c " "
Sisal, ⅜ inch.....9c " "
Sisal, ¼ and 5-16 in.....9c " "
Sisal, Medium Lath Yarn 10c " "

SASH CORD.

Braided, Drab.....lb 25c
Braided, White. common..lb 17½@18c
Cable Laid Italian ....lb, A 18c, B 16c
Common India.....lb 9c@9½c
Cotton Sash Cord, twisted....12@16c
Patent Russia.....lb 12½@13c
Cable Laid Russia.....lb 13½@14c
India Hemp, braided.....lb 14@15c
India Hemp, twisted.....lb 10@12c
Patent India, twisted.....lb 10@12c
Pearl Braided, cotton.....lb 17@18c
Massachusetts, white.....lb 23½c
Massachusetts, drab.....lb 20½c
Eddystone Braided, cotton....lb 19c
Harmony Cable Laid Italian....lb 18c
Ossawan Mills:
Crown, Solid Braided, white ..lb 18c
Braided, Giant, white.....lb 17c
Peerless:
Cable Laid Italian.....16c
Cable Laid Russian.....14c
Cable Laid India.....12c
Braided India.....18c
Phœnix, white.....19c
Samson:
Braided, Drab Cotton.....lb 32½c
Braided Italian Hemp.....lb 32½c
Braided, Linen.....lb 49c
Braided, White Cotton, Spot.lb.28½c
Silver Lake:
A quality, Drab, 40c.....15%
A quality, White, 35c.....15%
B quality, Drab, 35c.....15%
B quality, White, 30c.....15%
Italian Hemp, 40c.....15%
Linen, 57½c.....15%

SASH LOCKS.

Ives, Patent.....60@60&5%
Payson's Perfect.....Net
Payson's Signal (new list).....Net

SAWS.

Atkins' Circular.....Net
Atkins' Band.....Net
Atkins' Cross Cuts.....Net
Atkins' Mulay, Mill and Drag.....40%
Atkins' One-Man Saw.....Net
Atkins' Circular Solid and Inserted Tooth.....50%
Atkins' Bands over 2 in. wide.....60%
Atkins' Bands under 2 in. wide.57&10%
Atkins' Mill, Mulay and Drag.... 50%
Atkins' Cross Cuts.....40%
Atkins' One Man.....40&10%
Atkins' Narrow Cross Cuts.....40%
Atkins' Wood Saws and Blades.40&10%
Atkins' Hand Saws.....40%
Atkins' Compass Saws.....50%
Atkins' Butcher Saws.....40&10%
Disston Circular Solid and Inserted Tooth.....50%
Disston Cross Cuts.....Net
Disston Narrow Cross Cuts.....Net
Disston, Mulay, Mill and Drag....40%
Disston Framed Woodsaws.....35%
Disston Woodsaw Blades.....40%
Disston Woodsaw Rods.....25%
Disston Handsaws. Nos. 12, 99, 9, 16, D100, D8, 120, 76, 77, 8.....25%
Disston Hand Saws, Nos. 7, 3.....30%
Disston Compass, Keyhole. etc....25%
Disston Butcher Saws and Blades.35%

SAW FILERS

Stearns'.....25%
Silent saw.....35%
Sargent's.....60&30%
Reading.....37½%

SCALES.

Family, Turnbull's.....30@30&10%
Hatch, Counter:
Platform, 4 lb. by ½ oz..doz...$5.75
2 Platforms, 8 lb. by ½ oz. doz $16 00
Union Platform, Plain.....$1.75@$2.00
Union Platform, Striped..$1.85@$2 15
Chatillon's Eureka.....25%
Chattilon's Favorite.....40%
Chatillon's Grocers' Trip Scales ..50%
Pelouze Scales, Household Counter, Confect. Postal, Ice, &c.....50%
"The Standard" Portables.....45%
"The Standard" R. R. and Wagon 50%

SCREWS.

BENCH AND HAND.

Bench, Iron.....per doz. 60%
Bench, Wood, Beech..per doz. $3 50
Hand, Wood.....30%

COACH, LAG AND HAND RAIL.

Coach and Lag, Gimlet Point, list Sept. 20, 1899.....75@75&10%
Hand Rail, list Jan. 1, 1871.....75%

JACK SCREWS.

ack Screws.....70%

WOOD.

MANUFACTURERS' CIRCULAR PRICES.

New List.
pnatHead Iron.....87½%
uRoFl and Oval Head Iron.....85%
Flat Head Brass.....85%
Round and Oval Head Brass.....82½%
Flat Head Japanned.....82½%

SCYTHES.

Blood's.....$ 8 50
Clover.....8 50
Grain Clipper, Blood's.....10 50
Hollow Clip.....8 50
Silver Clip.....8 50
Honest Dutchman.....8 50

SHEARS.

	7	8	9 in.
Best.....	$16.00	$18.00	$20.00 gro.
Good.....	13.00	15.00	17.00 gro.
Cheap....	5.00	6.00	7.00 gro.

Straight Trimmers, &c.:
Best Quality Jap.....70@70&10%
" Nickel.....60@60&10%
Fair qual. Jap.....80@80&5%
" Nickel.....75@75&10%
Tailors' Shears.....40@40&10%
Acme Cast Shears.....40@40&5%
Heinisch's Tailors' Shears. 40@40&5%
Wilkinson's Hedge.....50%
Wilkinson's Sheep.....1900 list, 50%

SHINGLES, METALLIC.

Eastlake I. C. Tin Shingles, painted, pr sq.....$4 25
Eastlake I. C. Tin Shingles, galvanized, pr square.....$6 00
Octagon Fluted I. C. Tin Shingles, painted, per square..$5 50
Octagon Fluted I. C. Tin Shingles, galvanized. pr sq....$7 25

SIFTERS.

Eclipse.....per gr $15 00
Hunter's Genuine.....per gr $16 00

SKATE SHARPENERS.

Skate Sharp., Eureka, per doz $2 00 net
Washer Cutters, Woodard's, per doz.....$2 50 net

SLATE.

GENUINE NO. 1 BANGOR.

24x14, 24x12, 12x 8 } $3 50 pr sq. { 20x10, 18x10, 18x 9, 16x 8 } $4 50 pr sq
22x11, 20x12, 18x12, 16x12, 14x10, 14x 8, 14x 7 } $3 75 per sq. { 16x10, 16x 9 } $4 25 pr sq; 12x 7, 12x 6 } $3 25 pr sq

GENUINE NO. 1 BANGOR RIBBON.

24x14, 24x12 } $3 00 pr sq. { 20x10, 18x10, 18x 9, 16x10, 16x 8 } $3 50 pr sq
22x11, 20x12, 14x 8, 14x 7 } $3 25 pr sq.

SNAPS.

German.....40@40&10%
Covert Mfg. Co.:
Derby.....35&2%
High Grade.....45@2%
Jockey.....40&2%
Trojan.....45&2%
Yankee.....35&2%
Yankee, Roller.....30&2%
Covert's Saddlery Works:
Banner.....60&10%
Crown.....60&10%
Model.....60&10%
Triumph.....60&10%
W. & E. T. Fitch Co.:
Bristol.....40&10%
Empire.....50&5%
German.....40%
National.....50&5%
Perfect.....45%
Clipper.....50&5%
Champion.....40%
Security.....40%
Victor.....60&5%
Oneida Community:
Solid Steel.....65@65&10%
Solid Swivel.....65&10@65&10&10%
Sargent's Patent Guarded...66⅔&10%

SOLDERING FURNACES.

No. 3 Gems tin reservoir.....$6 00
No. 6 Gems copper reservoir.....8 50
Gem Gas Pots.....$25
Clayton & Lambert No. 1 Fire-Pot 6 00
Clayton & Lambert's Special Fire-Pot.....4 50

SPRINGS, DOOR.

Star (Coil) list Oct. '95.....net
Torrey's Rod 39 in. Per doz.....$1 20@$1 25
Warner's No. 1.....net 75

SQUARES.

Steel and iron.....70&10%
Nickel plated.....65, 10&5%
Try squares and bevels.....65, 10&5%
Disston's.....45%
Bemis and Call, pocket.....30%
Winterbottom's try & mitre.....30%
Starrett's.....25%

STAPLES.

Barbed Blind.....per lb., 10c
Poultry Netting.....per lb., 5c

STAPLE PULLERS.

Russell Staple Pullers..per doz., $9 00

STOVE PUTTY.

1, 10 & 25 pound Cans.....per lb., 5c
500 pound Kegs.....per lb., 4½c

STROPS.

RAZOR.

Emerson.....460 to 60&5%
Imitation.....20, 10&5%
Torrey's.....20%
Tower & Lamont.....per doz $4 00
04 Combination.....per doz 3 75

TACKS.

List Jan. 15, '99.
Carpet Tacks, American.....90&40%
American Cut Tacks.....90&30%
Swedes Iron Tacks.....90&40%
Swedes Upholsterers' Tacks.....90&40&10%
Gimp Tacks.....90&40&10%
Lace Tacks.....90&40&10%
Trimmers' Tacks.....90&30%
Looking Glass Tacks.....70&10%
Bill Posters' and Railroad Tack90&40%
Hungarian Nails.....80&15%
Common and Patent Brads....80&10%
Trunk and Clout Nails.....80&10%

TRAPS.

GAME.

Oneida Pattern.....75&5@75&10&5%
Newhouse.....45@50%
Hawley & Norton.....65@5&70%
Victor (Oneida Pattern)..75@75&10%
Star (Blake Pattern)....65&10@70&5%

MOUSE AND RAT.

Mouse, Wood, Choker, doz. holes.....8½@9c
Mouse, Round or Square Wire, doz.....$0.85@1.00
American Pattern French Rat and Mouse Traps—
No. 1, Detroit Marty Pattern, per doz. $4.50; in ½ gro. lots, per doz.....$4.00
No. 2, Detroit Marty Pattern, per doz, $3.25; in ½ gro. lots, per doz.....$3.00
Detroit Marty Pattern Mouse, per doz. $2.00; in ½ gro. lots, per doz.....$1.75
Diamond Joe Mouse Traps, per doz.....60c
Diamond Joe Rat Traps, per doz.$1.00
Marty French Rat and Mouse Traps (Genuine:)

TWINE.

Flax Twine—

	BC	B
No. 9, ¾ and ½ lb. Balls...	20c	24c
No. 12, ¾ and ½ lb. Balls...	17c	20c
No. 18, ¾ and ½ lb. Balls...	14c	17c
No. 24, ¾ and ½ lb. Balls...	14c	17c
No. 36, ¾ and ½ lb. Balls...	13c	16c

Chalk Line, Cotton, ½ lb. Balls18@20c
Cotton Wrap., 5 lb. Balls to lb 16 to 20c
2-Ply Hemp, 1½ lb. Balls (Spring Twine).....12@15c
3-Ply Hemp, 1 lb. Balls.....12@15c
3-Ply Hemp, 1½ lb. Balls.....
2, 3, 4 and 5-Ply Jute, ½ lb. Balls....8c
Mason Line Linen, ½ lb. Balls....45c
No. 264 Mattress, ¾ and ½ lb. Balls.....34c
Wool.....5½@6c

VISES.

Solid boxes.....40%
Parker's.....20%
Howard's.....35%
Bonney's.....35%
Trenton.....40%
Stearns'.....50%
Cheney's.....12½%
Massey's.....25%
Parallel.....30&5%
Holland's.....35%
Stevens'.....25%
Miller's Falls.....40%
Prentiss.....20%
No. 1, Rat each $1.12½; per doz.....$12.00
No. 3, Rat, per doz. $6.00; case of 50.....$5.25doz
No. 3½, Rat, per doz $4.75; case of 72.....$4.25 doz.
No. 4, Mouse, per doz. $3.50; case of 72.....$2.75 doz.
No. 5, Mouse, per doz. $2.75, case of 72.....$2.25 doz.
Schuyler's Rat Killer, No. 1, per gro. $30.00; No. 2, per gro. $20.00; Mouse, No. 3, $18.00.....50%

FLY.

Balloon, Globe or Acme.....doz. $1.15@1.25; gro. ... $10.50@11.00
Harper, Champion or Paragon.... doz. $1.25@1.40; gro....$12.00@12.50

TROWELS.

Disston Brick and Pointing.....30%
Disston Plastering.....25%
Disston "Standard Brand" and Garden Trowels.....40%
Never-Break Steel Garden Trowels.....gro. $7.00
Peace's Plastering.....30%
Rose Brick and Plastering.....25&5%
Woodrough & McParlin, Pl'st'ring

WASHERS.

LEATHER, AXLE—

Solid.....80&10&10@85%
Patent.....85&10@85&20%
Coil: ⅜ 1 1⅛ 1¼ inch.
11c 12c 13c 15c per 100

IRON OR STEEL.

Size bolt 5-16 ⅜ ½ ⅝ ¾
Washers $5.20 $4 30 $3.00 $2.80 $2.60
In lots less than one keg add ¼c per lb; 5-lb boxes add ½c to list.

CAST WASHERS.

Over ½ inch, barrel lots per lb.....1½@1¾c

WELL WHEELS.

8-in., $3.20.....10-in., $2.60
12-in., $3.25.....14-in., $3.25

WIRE AND WIRE GOODS.

Brt. and Ann., 6 to 9, 70&10@70&10&5%
Brt. and Ann., 10 to 18, 72½@72½&10%
Brt. and Ann., 19 to 26, 75&7½@75&10%
Brt. and Ann., 27 to 36.....75&10&5@75&10&7½%
Cop'd and Galv., 6 to 9, ...70@70&10%
Cop'd and Galv., 10 to 18.....70&10@70&10&5%
Cop'd and Galv., 19 to 26.....75&7½@75&10%
Cop'd and Galv., 27 to 36.....75&10@75&10&5%
Tinned, 6 to 14.....75@75&5%
Tinned, 15 to 18.....70&5@70&10%
Tinned, 19 to 26.....70@70&5%
Tinned, 27 to 36.....65&10@70%
Annealed Wire on Spools.....70&5@70&10%
Brass and Copper Wire on Spools.....60&5@60&10%
Brass, list Feb. 26, '96.....25%
Copper, list Feb. 26, '96.....15%
Cast Steel Wire.....50%
Stubs' Steel Wire, $6.00 to £.....40%

BRIGHT WIRE GOODS.

List April 1, 1901.....85@85&10%

WIRE CLOTH AND NETTING.

Galvanized Wire Netting....85@85&5
Ptd Screen Cloth per 100 ft $1.00@$1
Light Hardware Grade:
2-8 Mesh, Plain (8c list) sq ft... 1½c
2-8 Mesh, Galv. (8c list) sq ft ...2½c

WRENCHES.

Agricultural.....70&10%
Case lots.....75&10%
Acme.....60&5%
Baxter's S.....60&10%
Bull Dog.....70%
Coe's Genuine.....40&10&5%
Coe's "Mechanic's"..40&10&10&5&5%
Alligator.....60&10&10%
Bemis & Call's:
Adjustable S.....35&5%
Adjustable S Pipe.....40%
Briggs' Pattern.....30&10%
Combination Black.....40&5%
Combination Bright.....40%
Cylinder or Gas Pipe.....55%
Extra Heavy.....45%
Merrick's Pattern.....50%
No. 3 Pipe, Bright.....55%
Bindley Automatic.....30%
Boardman's.....33⅓%
Donohue's Engineer.....40&10%
Eagle.....50&10%
Gem Pocket.....30%
Hercules.....70%
Knife Handle, Machinists' (W & B.):
Case lots.....50&5%%
Less than case lots.....60%
Improved Pipe (W. & B.).....50&10
Solid Handles, P. S. & W.....&10 &
Stevenson.....56

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE, for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS.—H. W. T. JENNER, Patent attorney and mechanical expert, 608 F street, Washington, D. C. Established 1883. I make an examination free of charge and report if a patent can be had and exactly how much it will cost. Send for circular. Member of Patent Law Association.

PATENTS HUBERT E. PECK, 622 F St., N. W. Washington, D. C. Consulting Expert in Patent Causes, U.S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

For Sale—Hardware, stove and tinware stock. Doing a good business. In railroad town of 4,500 in northern Minnesota. Stock of $4,000. Only hardware store in town. A good opening. Investigate, prospective hardware buyers. Satisfactory reasons for selling. Address "Minnesota," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 4

For Sale—Clean stock of hardware and harness, invoice about $5,000. In county seat town in west central Iowa. Good reason given for selling. Must be taken quick. Address "Quick," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 4

For Sale—Clean stock of hardware. Located in best town in north-western Ia. Population 3,500. Best of reasons for selling. Address "B," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 4

Wanted—Small stock of Hardware $1,500 to $2,000, in exchange for southwestern Minnesota land. Address Box 140, Harris, Iowa. 3

For Sale—The best paying hardware store, tinware, pump, etc., business in southwest Mo. A good paying plumbing and tinshop business. Town of 7,000 inhabitants. Address "Box A21," care AMERICAN ARTISAN, Chicago, Ill. 3

For Sale—Tinning and plumbing business; good opportunity for good man with small capital; owner can not tend to it on account of other business. Stock for sale is worth $800. Address "Pan-American," care AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3

For Sale—Half interest in hardware stock of about $1,500, in southern Minn Good opening. It will pay you to investigate. Reasons for selling. Address "O K," care AMERICAN ARTISAN, Chicago, Ill. 3

Wanted—Manufacturers of tin ware, hollow and granite ware, locks, builders' hardware, etc., to send me a copy of their catalogues and prices, as I am going to buy those articles in large quantities hereafter and want to buy them where I get the best value for my money. E. C. Alsmeyer, Cottage Grove, Wis. 2

Wanted—To buy one second-hand in good order, No. 54 or No. 154-90 in. adjustable P. S. & W. Tin Bar Folder. Address Frank E. Lahr, Loreda, Nev. 2

For Sale—Clean stock of hardware, stoves; tin shop, buggies and implements in connection located in one of the best farming counties in Illinois. Stock will invoice about $3,500 Cheap rent, best location in town; one other hardware store in town. Population about 1200. Cheese factories, good schools, four churches, etc. Here is a good chance for you, who mean business. Reason for selling—going onto my farm. Address "Farm Hand," care of THE AMERICAN ARTISAN, 69 Dearborn, St., Chicago, Ill. 2

For Rent—The best hardware store; located on the best corner in the place. No old stock to buy. The town is in a most flourishing condition. This is an opportunity of a life time. Will some good, live hardwareman come and investigate. Don't come unless you mean business. Call on E. Meredith, 61 Webster St., Batavia, Illinois. 2

For Sale—Hardware stock and tin shop, established 12 years, on N. W side of Chicago, with or without building. Address "N. W." care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

For Sale—Leading tin shop and pump business in good town in central Illinois. Address "Leading," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

160 acre farm for sale or to exchange for stock of goods or good building. Valued at $4,000 to $5,000. Address "Box 28," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

For Sale—Slate and tin shop. Town 10,000 population, Westmoreland County, Pa. Splendid chance for a young man. Write L. H., care John Hamilton, Pittsburgh Pa. 2

For Sale—A fine hardware business. Failing eyesight compels us to dispose of our business. Main stock $8,000; business in 1900, $23,000. Clean and in fine location. Bran h stock $1 500; in same city doing good business. Will sell one or both stocks to same party for cash or good ecurity. No trade. This is a genuine good hance for any one wishing a paying hardware usiness and will pay to investigate. Address W. D." care of D. Stern, 69 Dearborn St., Chi-ago, Ill. 2

For Sale—Tin and slate roofing shop. Lots of work on hand. Town of 7,000 population. Allegheny County, Pa. Write L. H., care John Hamton, Pittsburgh, Pa.

For Sale—Stock of hardware and harness supplies, in a live, new town of 125. Excellent territory, no competition in town. Member of Christian Church preferred. Invoice $3,000. Good reasons for selling. M. M. Heptonstall, Pioneer, Iowa. 2

For Sale—Stock of hardware, stoves and plumbing supplies. Will invoice from ten to fifteen thousand dollars in one of the best little cities in Illinois of about 5,000 inhabitants, within sixty miles of Chicago. Address "B. J.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago Ill.

Wanted—A small-sized safe that is in good condition. Weight from 300 to 500 lbs. Address Box 47, Huntley, Minn. 2

For Sale—First-class stock of hardware, tinware and stoves. Invoice about $4,000. Southern Minnesota, best location in town of 2,300 people, good surrounding farming country. Tin shop in connection. Address "Box GZ," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

TINNERS' TOOLS.

Wanted at Once—Set of tinners' tools. Send list and price. Address "W. H.," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. Ill. 3

For Sale—A set of tinner's tools in first-class shape; and square shears. Will sell cheap for cash. B. C. Bixler, Bakersville, O. 26

For Exchange—One new two-roller McClair butter worker, 100 lbs. capacity; corrugated roller; the perfection of hand work. J. T. McKim, Thorntown, Ind. 26

Wanted—A second-hand 8-foot Cornice Brake. Must be in first-class condition. Address, giving condition, price, etc., care P. O. Box 465, Erie, Pa. 25

HELP WANTED.

We want a mechanic who is willing to help us push our work and whose interest will be our interest. Our work is in and from tinshop with some plumbing and furnace work. Address at once. 167 Bridge St., Ashtabula Harbor, O. 4

Wanted—Experienced range salesmen to sell the Artistic Enameled Steel Ranges on commission. Must be first-class salesmen with references. Artistic Enameling Works, St. Louis, Mo. 4

Wanted—A competent, experienced foreman for range manufacturing. One who understands thoroughly the mounting of castings, riveting and cutting sheets for ranges. Apply Box No. 206, Memphis, Tenn. 4

Wanted—A first-class cornice maker, cutter and estimater as working foreman in sheet metal, furnace and tin work: one who understands all the branches of the business and not afraid to work. This is a good job for the right man. State age, nationality and wages desired; must be temperate. Address Geo. Rome & Co., Carnegie, Pa. 4

Wanted—Young man as tinner; one who has had several years of experience at the trade. Steady work. When writing state wages wanted. C. Hinsch, Farmersburg, Iowa. 4

Wanted—Young man who knows something about pumps and wind mills and can do repairing in tin shop or assist in store. Permanent position for right man. C. A. Morrison, Ellendale, N. D. 4

We desire the services of an A No. 1 tinner, familiar with furnace work, not over thirty or forty years old. Must be sober, active and able to give good references. To such a party a permanent position will be given and good wages. Inquire of the Barber Mfg. Co., Ashtabula, O. 3

2 good plumbers and 1 good tinner wanted at once. Good wages and steady work. H. J. Klingman Co. Rochester, Minn. 2

Wanted—At once; two good plumbers and steam fitters; also one good tinner. Good wages and steady work. Must be sober and industrious. Address "Sober," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

Wanted—At once, a good all-around tinner; one who can do plumbing and pump work; married man preferred. Good wages and steady employment to capable man. Address Flemming Bros., Armstrong, Ia. 2

Wanted—A German or Swede tinner; one who can do furnace work and clerk in store. Salary $10 per week and commission. Address J. W. Ryan, Salem, S. D. 2

Wanted—Foreman in stove mounting department, near Chicago, who understands every detail of stove manufacturing and the economical management of help. Address, stating experience, age, nationality, reference and wages expected. Address "Foreman," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

Wanted—Tinner for in and outside work, who understands furnace work. Must be sober. Good wages and steady job to the right man. Must have references. Address "Outside Work," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

Wanted—A young tinner, who can help clerk in store, speak german, not be afraid to work and has references, can get a steady job in Chicago. Address "Hardware Store," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

Wanted—Experienced stove salesman for Iowa and Minnesota, for a good line. Address "Good Line," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

Wanted—Tinner to make stove pipes, ash pans and mount todds. Bonnet-Nance Stove Co., Chicago Heights, Ill. 2

Wanted—A clerk for a general store who can put in about $500 in store as investment. A good chance for a hustler. Address "Box XYZ," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

Wanted—Experienced clerk for hardware store. Must be able to figure in builders' hardware. One who speaks German preferred and can give good references. Address "German," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

SITUATIONS WANTED.

Situation Wanted—By first-class tinner; neat workman, 20 years' experience on roofing, spouting, tin ware and general job work; repair gasoline stoves, etc. Warm air, steam and hot water heating. Considerable experience at plumbing. Steady work year around. State wages. Address P. O. Box 383, Hillsboro, Ill. 4

Situation Wanted—By an enameler as superintendent or foreman; can produce sheet steel or cast iron wares successfully. Address "Enameler," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

Situation Wanted—By a sober and reliable married man, with small family. Expert pump man; have clerked in hardware store, can do steam, hot water and gas fitting; have worked as helper in tin shop and putting up gutters and conductors. Steady work wanted. Iowa preferred. Address, "M," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 2

Wanted—Position in tin shop; can do roofing, guttering, gasolene stove repairing and anything that comes into an ordinary tinshop. Have had some experience in furnace work. Strictly temperate and can furnish best references. Am not afraid to work and can clerk in store if needed. Address Box 473, Dwight, Ill. 2

Position Wanted—As tinner by a good reliable temperate, up-to-date young man. 7 years' experience. Reference given. Can come at once. Illinois preferred. Address Box 933, Portage, Wis. 1

SPECIAL NOTICES.

FOR SALE.

A Bargain. Stock of hardware and stoves, first-class tin shop in connection. Doing good business. Good reasons for selling. Located in south-eastern Wisconsin. Address,

B. Garretts, Pewaukee, Wis.

FOR SALE.

Well established hardware, tin and stove business, together with a well paying tinshop with property. In one of the best locations for an enterprising man to make money. CHARLES CAMMERER, Dayton, O.

WANTED

Traveling salesman thoroughly conversant with the tin plate and metal business. Address

Merchant & Co., Inc.
Philadelphia, Pa.

SPECIAL NOTICES.

Four first-class salesmen to travel with a steam automobile, placing agencies and selling a line of parts and specialties. Territory includes a portion of New York State, New Jersey, Pennsylvania and New England. Must have A1 references and be able to furnish cash security for carriage. Address Auto, care the American Artisan, 69 Dearborn St., Chicago.

WANTED.

Salesmen to sel steel ranges on commission. Address

"H. F. T."

care THE AMERICAN ARTISAN
Chicago, Ill.

Wanted.

Salesmen calling upon stove trade, to handle line of steel ranges on commission. Address, with references,

"Box 411"

care THE AMERICAN ARTISAN,
Chicago, Ill.

WANTED.

A first-class stove salesman at good salary for territory west of the Missouri River. None other need apply. Address, giving references,

Box 206,
Memphis, Tenn. 26

SALESMEN WANTED.

Salesmen calling on the stove trade can learn of a profitable side-line by addressing

Independent Register Co.,
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A member of Minnesota Retail Hardware Association, 15 years in retail business in Minneapolis, central location, prosperous business, desires active partner to help him enlarge and add jobbing department for city trade. Closest investigation solicited. Address

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With good connections in British Isles and Continental Europe wishes agencies for a few lines of American manufacture. Prompt attention. References. Address

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If You Advertise,

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100 Steel Range Ads.	100c

or intend to, these ads are worth 10 times what they cost you. Increased our sales. Catchy headlines, ready for printer. Stamps taken. Address, **H. P. Townley, Terre Haute, Ind.**

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An experienced foreman in gasoline and oil stoves to take charge of machine shop, press and die room, capable of designing and handling dies and pushing through work at lowest cost and lots of it. Apply by mail, giving age, experience and reference.

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Read what leading technical editors have to say concerning

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Practical and Exceedingly Valuable Guide.

"The Tinsmiths' Pattern Manual" is copiously illustrated with drawings and working patterns throughout the 250 pages of the publication. The volume is especially of importance to tinners, coppersmiths, plumbers, zinc workers and sheet metal workers generally. Its pages are devoted to presenting the general geometrical principles, each one of which, when mastered by the metal worker, enables him to draw a number of different patterns whose principle of construction is essentially the same. The sheet metal worker who masters the geometrical construction presented can easily develop the surface of any article with much greater ease and rapidity than by following the various methods in vogue. The book or guide eminently combines the standpoint of the mathematicians and the workshop, and is approved by mechanical engineers and technical professors as well as by working tinners. The first edition, so carefully and ably prepared by Joseph Kane Little, a practical tin worker, was published eight years ago, and the demand for the work speedily exhausted the large number of copies printed. Since that time there have been numerous calls for this work, which is recognized by leading sheet and metal workers as the standard authority for this line of industrial endeavor. This new edition has been thoroughly revised and brought up to date, ample cognizance of the latest changes in sheet metal work having been taken.

The trade will undoubtedly accord to this new edition as generous a recognition as was accorded to the first one.—St. Paul Trade Journal, April 27, 1901.

Authoritative and Comprehensive.

The new edition of "The Tinsmiths' Pattern Manual" has been thoroughly revised and brought up to date. The work is not only authoritative but comprehensive, the first chapters preparing the beginner for the difficult technical operations which are described in the succeeding chapters. This work should be secured by all tinsmiths who have not a copy of the first edition.—Canadian Hardware, Toronto, Can., April 27.

A Book of Specific Information.

The new edition of the "Tinsmiths' Pattern Manual," is a cloth bound volume of 248 pages, profusely illustrated, and, as the name implies, gives specific information, with accompanying cuts, for the making of all kinds of patterns. Elementary problems are first discussed, followed by the more difficult and unusual.—Iron and Steel, Chicago, April 27, 1901.

Recognized as a Standard Authority.

The book is for the use of tinners, coppersmiths, plumbers, zinc workers and sheet metal workers generally, and since the first edition, issued eight years ago, has been recognized by sheet metal workers as the standard authority for this line of industrial endeavor. The work is designed not merely to furnish a batch of isolated patterns in common use, but to lay down general geometrical principles, each one of which, when mastered by the reader, will enable him to draw a number of different patterns whose principle of construction is essentially the same. The book is copiously illustrated by means of diagrams. The compiler is Joe K. Little, C. E.—Farm Implement News, Chicago, April 25, 1901.

The Standard Authority.

Eight years ago "The Tinsmiths' Pattern Manual" first appeared, and though a large number of copies were printed, such was the demand from tinners, coppersmiths, plumbers, zinc workers and sheet metal workers generally that the edition was soon exhausted. Since then calls for the work, which is recognized by leading sheet metal workers as the standard authority for their line of industry, have become more and more numerous, and in response this new edition is published, thoroughly revised and brought up to date, so as to cover the latest changes in sheet metal work. — Manufacturers' Record, Baltimore, April 25, 1901.

Covers the Field Very Thoroughly.

The "Tinsmiths' Pattern Manual," presents patterns for tinsmiths' work, as well as other ideas for tinners, coppersmiths, plumbers, zinc workers and sheet metal workers, generally. After a careful perusal of this manual, we are prone to admit that it covers, very thoroughly, the field it is designed to reach. It is indeed a handy work that every hardware establishment should possess.—Plumbers' Trade Journal, New York, May 1, 1901.

A Most Useful Book.

One of the most useful books to the sheet metal working trade is "The Tinsmiths' Pattern Manual," the 20th century edition of which has just been issued by THE AMERICAN ARTISAN. It is scientific and practical, and is intended to be a complete guide in the art of making patterns. General geometrical principles are laid down, each one of which, when mastered by the student, will enable him to draw a number of patterns. The book is profusely illustrated.—The New York Commercial, May 2, 1901.

An Accurate Guide.

"The Tinsmiths' Pattern Manual" undoubtedly is a scientific, complete and serviceable compendium for the use of workers in all kinds of sheet metal, and will have a wide sale. It gives both simple and elaborate directions for planning and preparing patterns of every description needed, giving due attention to the various methods of fastening and strengthening the finished work, and, as its name implies, is an accurate guide to workers desiring to become skilled in the art of making patterns. The book is edited by Joseph Kane Little, C. E., of Philadelphia, is plainly printed, substantially bound, and profusely illustrated with diagrams, etc. The work is a credit to THE AMERICAN ARTISAN office.—Paint, Oil and Drug Review, Chicago, April 24, 1901.

Eagerly Sought For.

The first edition of "The Tinsmiths' Pattern Manual" appeared about eight years ago, and the entire edition having been exhausted made it necessary to issue a second edition. This is now extant and appeared April, 1901, thoroughly revised and brought up to date, ample cognizance of the latest changes in sheet metal work having been taken by the compiler. Mr. Joe K. Little, C. E., the author of the "Tinsmiths' Pattern Manual," deserves the thanks of tinners, coppersmiths, plumbers, zinc workers and sheet metal workers generally. The latest edition is nicely bound in red cloth, with 284 pages and numerous cuts and diagrams.—Chattanooga Tradesman, May 1, 1901.

Has Been Found Very Useful.

"The Tinsmiths' Pattern Manual," by J. K. Little, C. E., is a new edition of this well-known work. It is designed for tinners, coppersmiths, plumbers, zinc workers and sheet metal workers generally. The first edition was brought out eight years ago, and it has been found very useful.—Engineers Review, April, 1901.

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"The Tinsmiths' Pattern Manual" is the latest of THE AMERICAN ARTISAN Manuals. All these books are practical. And "the sheet metal worker who masters the geometrical constructions, presented in 'The Tinsmiths' Pattern Manual,' can easily develop the surface of any article with much greater ease and rapidity than by following the various methods in general vogue."—Engraver and Electrotyper, Chicago, May 1, 1901.

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"The Tinsmiths' Pattern Manual," patterns for tinsmiths' work, is an up-to-date twentieth century book which should be in the hands of every sheet metal worker. It is profusely illustrated, giving full details, measurements and other memoranda which will render it of great practical value to the tinsmith and hardware merchants. These latter should see to it that every tinner and sheet metal worker has at least one copy of this eminently valuable book. It is simple in language and will be readily understood by the neophyte and apprentice, as well as by the practical tinner, coppersmith, plumber and zinc worker.—The Black Diamond, Chicago, April 27, 1901.

Revised and Reissued.

"The Tinsmiths' Manual," by Joe K. Little, C. E., and published by THE AMERICAN ARTISAN Press, Chicago, has been in such demand during the past eight years that the publishers were compelled to reissue the work to supply the demand. It has been thoroughly revised and brought up to date so as to meet all the requirements of the trade.—National Laundry Journal, Chicago, May 1, 1901.

A Vade Mecum for Tinners.

"The Tinsmiths' Pattern Manual," by Joe K. Little, C. E., descriptive of patterns for tinsmiths' work, is a vade mecum for tinners, coppersmiths, plumbers and zinc and sheet metal workers generally. It was originally published about eight years ago and a large edition was sold. Continued demand for more has induced the author to revise and enlarge his original work, which now appears from the press of THE AMERICAN ARTISAN, 69 Dearborn street, Chicago. It is bound in red cloth, and has 248 pages, fully indexed.—The American Miller, Chicago, May 1, 1901.

A Bridge to Success.

The second edition of "The Tinsmiths' Pattern Manual" has just come off the press to meet the numerous calls for this work, which has for eight years been recognized by leading sheet metal workers as the standard authority for this line of industrial endeavor. Problems which remind one painfully of the "Pons Asinorum" permeate the book through, and yet like those rough Euclidian planks of schoolboy days, they form the bridge by which the ardent metal worker may cross the gulf of inexperience and uncertainty and reach the land of utilitarian success. The author is Joe K. Little, C. E.—Brick, Chicago, May 1, 1901.

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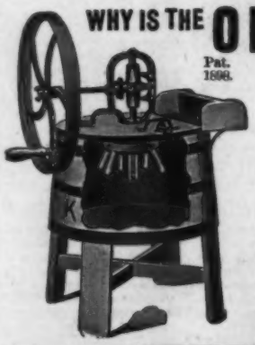

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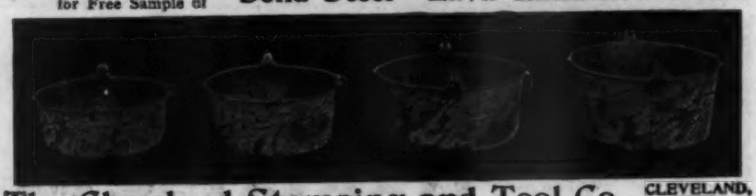

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is the only lamp fit for house use. No noise, no flicking out, but is quiet, and a steady light. Made in DOUBLE, SINGLE and STAND LAMPS. Write for circular and price list, and terms to agents.

THE GREAT OBJECTION to all of the different makes of gasoline lamps **heretofore offered** to the public has been that they require **generating**, which means tiresome delay in lighting, difficulty in keeping in working order and heavy expense for repairs; the different parts of the lamps being complicated. There is also the expense of **alcohol**, which is an absolute necessity with all **generating lamps.** The "Q" requires no generating, no alcohol, no waiting, it is operated the same as ordinary city gas, **lights instantly**, can be **turned up or down**, as desired, and is absolutely safe.

You are doubtless familiar with generating lamps and the many disagreeable features. No generating lamp will sell at any price where our **Quicklight Lamp** is known, and as a gift the generating lamp will soon cost more money for alcohol, repairs, etc., than our lamp at full retail price.

We are not trying to compete with cheap Lamps. You can buy them at any price. We prefer to offer you the best lamp ever made.

We guarantee entire satisfaction. Patented July 24, 1900.

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Improved Shears and Gauge Punches, with or without engine, or Direct Steam Shears. 8 different styles [hand or power].

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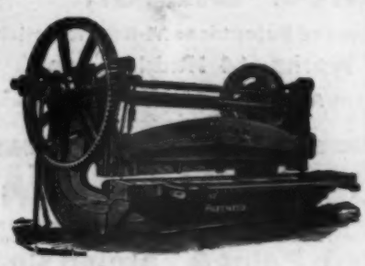

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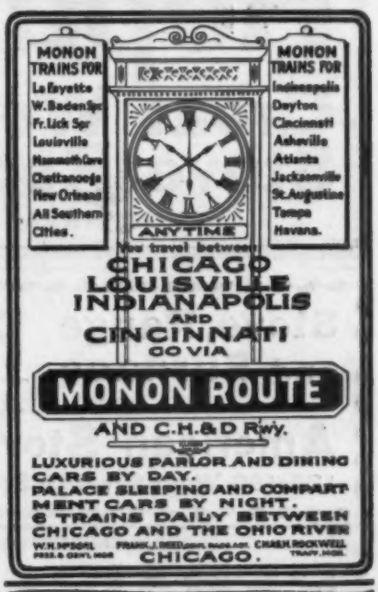

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Sheet Metal Workers Guide.

A Practical Handbook for Tinsmiths, Coppersmiths and Zinc Workers. A collection of rules and diagrams for describing the most useful patterns ordinarily required, preceded by chapters on Sheet Metal Work, Soldering, Geometry as applied to Sheet Metal Working. By W. J. E. CRANE. Price, postpaid, 60 cents.

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Champion Stove Clay

The only Stove Lining made of crucible materials.
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To Stove Dealers

NOTICE.

Do you know that the new A-B dealers' stove polish is made dry and you can thin it as you wish. It is the cheapest, brightest and easiest polish to use—no dust—no rust—waterproof. Keeps in any climate. Put up in 5 lb. boxes—Patented. No tin cans to pay for. Mixes quicker than paste; no drying up, good always. Used by a great many stove manufacturers who are sending duplicate orders. Send for price list, it will save you money.

AYLING BROS.,
Sole Manufacturers and Patentees of A-B Stove Polish.
Office and Works, 14 Haddon Ave.,
Address Department A. CHICAGO, ILL.

FOR MICA

Sheet, cut or uncut, Powdered and Flake
WRITE TO
ASHEVILLE MICA CO.
ASHEVILLE, N. C.

If the stove Foundries are NOT consolidated, are you fixed to fight the present fierce competition?

Are two concerns in New England, three in Pennsylvania, and three in New York state (one a new beginner), going to monopolize the best trade simply because they are using our patterns for "Cheap to make—Cheap to sell" stoves and heaters?

Troy and Albany might still be making seven-tenths (7-10) of all stoves manufactured in U. S., as they did twenty years ago, had the Foundries listened to our interested (of course), but at the same time sound and wise counsels.

BE WISE!

THE GOBEILLE PATTERN CO., CLEVELAND, OHIO.

THE GEO. W. COPE STOVE PATTERN WORKS,
Randolph and Atwater Sts.
DETROIT, MICH.

Experience. Correctness.

Acme Pattern Works
STOVE and HEATER
Patterns
AKRON, OHIO.

Promptness. Satisfaction.

Indianapolis Artistic Pattern Works,
Cor. Fenneman and Minnesota Sts.
INDIANAPOLIS, IND.
Perfect Work. Right Prices.
Special Stove and Furnace Patterns.

Advertising is the root of all money.

AMBER VIOLIN OIL VARNISH

This Varnish is made from the best Italian Amber and is equal in depth, beauty of color and brilliancy to the famous old Cremona Varnish.

Buckeye Paint & Varnish Co., Toledo, O.

REPAIRS FOR ALL STOVES

Pipe Dampers, Mica,
Stove Rods, Paste, Stove Putty,
Stove Knobs, Etc.

Wm. T. Dust Co.,
231 Brush St., DETROIT.

M. Brucker,

Manufacturer and Jobber of

Stove and Range Repairs.

FOUNDRY, OFFICE AND WAREROOMS
325 to 331 North Lincoln St.,
CHICAGO.

J. L. Morris Stove Repair Co.

Wholesale and Retail Dealers in

Stove and Range Repairs, Mica, Etc.

OFFICE AND WAREROOMS
29 and 31 Desplaines Street, Chicago.

Sole Western Agents for BURDETT, SMITH & CO., and other Manufacturers' Original Repairs.

GEM SOLDERING FURNACES.

The best soldering furnace yet put on the market. We guarantee every furnace to be worked out of doors or on roofs in all kinds of weather. They are intended to supply a want long felt by Tinners, Plumbers, Electricians and Pattern Makers We have many kinds for many uses.

SMOKELESS
ODORLESS
NOISELESS
RELIABLE
DURABLE
PROMPT
EFFICIENT

BURGESS SOLDERING FURNACE CO.
SEND FOR CATALOGUE AND PRICES. COLUMBUS, OHIO.

The O. K. Steel Brake.

THE O K Steel Brake

Prices for Our Regular Sizes:

No.	Gauge it will Form Full Length.	Length on Forming Edge.	Price.
1	16	12 ft. 1 in.	$300
2	16	10 ft. 1 in.	225
3	16	8 ft. 1 in.	150
4	22	8 ft. 1 in.	100
5	12	4 ft. ½ in.	75
6	16	4 ft. ½ in.	60
7	22	4 ft. ½ in.	50

Formers on cornice brakes included.
Discount and particulars on application.
Brakes for steel range work and other specialties to form up material from 10 gauge up.

Dreis, Andrews & Krump, SUCCESSORS TO O. K. MFG. CO.
3039 and 3041 S. Halsted Street, CHICAGO, ILL.

FLEMING BROS.,
ARMSTRONG, IA.,
.. .. WRITE:

"Please discontinue our ad. for a tinner in your valuable paper. We are getting applications from tinners every day, but have secured one by the ad. in THE AMERICAN ARTISAN."

ORDER YOUR

Repairs for Stoves, Ranges and Furnaces

FROM

City Stove Repair Co.
CLEVELAND, OHIO.

We guarantee prompt and careful attention. Send for Order Slips.

The Brohard Damper Clip,

Easily Adjusted

The Clip being malleable iron, will not break in riveting.

Cost no more than all cast.

Sample free to introduce.

Write us.

The Brohard Co.
Phila., Pa.

BIG FOUR ROUTE

Chicago to { Indianapolis, Cincinnati, Louisville, the South and Southeast

Peoria, St. Louis, Indianapolis, Cincinnati, Louisville } To **New York** AND **The East**

W. P. DEPPE, A. G. P. & T. A. — W. J. LYNCH, G. P. & T. A.
CINCINNATI.

J. C. TUCKER, G. N. A., 234 Clark St., Chicago

F. D. Burgess, Waupaca, Wis., writes:

"Please take out advertisement for Tinner, I have one in sight that I think I shall get. I have had all kinds of letters from men in this state, Ills., Iowa and Minnesota. I am running tin and plumbing shop here in connection with the Union Stove Co."

Eccentric Stove Kettles and Pots.

The peculiar construction of bottoms enables one to use these goods on either size hole designated by the number, say 6 and 7, a feature that is self recommending to all dealers. They can also be used on smaller top stoves by turning the narrow rims of bottoms together.

Blacklock Foundry,

South Pittsburg, Tenn.

Dietz Nos. 1 and 2

Blizzard Dash Lamp (Cold Blast)

These are our well liked Nos. 1 and 2 Blizzard, made with reflectors for use as Dash Lamps. They are made on the new COLD BLAST PRINCIPLE, give an extra fine light, and will stay alight in ANY WIND.

They are very convenient, combination Lanterns, and can be used as Hand Lanterns, Wall Lamps or Dash Lamps, and are fitted with the same convenient Side Lift as our regular Blizzard Lanterns. For use on the dash, each lamp is provided with a strong spring to clasp over the dash.

No. 1 is japanned blue, is fitted with our patent Bull's-eye lens on perforated plate, takes a $\frac{5}{8}$-in. Burner and Blizzard Globe, and holds oil to burn $14\frac{1}{2}$ hours.

No. 2 is japanned blue, takes a 1-in. Burner and Blizzard Globe, and holds oil to burn 19 hours. The oil pots of these lanterns are drawn from tinned, sheet steel, and are re-tinned after being shaped. This adds largely to their lasting qualities.

ALL DIETZ LANTERNS are SAFE and RELIABLE.

Where a Dash Lantern is required, giving a large light, these are unequalled.

FOR SALE BY

ALL LIVE JOBBERS.

If you handle Lanterns send to us for a catalogue and to your jobber for prices.

R. E. DIETZ COMPANY, New York City.

ESTABLISHED 1840.

Diamond Extension Stove Back.

The Only Back without **BOLTS, WEDGES** or **KEYS.** They are easily adjusted and fitted to a stove by anyone.

Patented, July 11th, 1893. Canadian Patent, June 14th, 1894.

EXTENDED.

Manufactured By **The Adams Company,** DUBUQUE, IOWA

F. W. CARLEY,
Hancock, Wis.,
Writes:

"I received your paper this morning also more letters than I have got time to answer. I will ask you now to please take out my ad, as I have a position now, as tinsmith. I am well pleased with the paper, and am very thankful for the information I have received from it. Every tinner should take it. A man could not afford to be without it for the small price it costs."

You Cannot

Afford to do without THE AMERICAN ARTISAN in your business. It costs but $2.00 a year for 52 issues. Send for our list of premium books.

The American Artisan,
69 Dearborn Street,
Chicago.

Stanley Rule and Level Co.

IMPROVED CARPENTERS' TOOLS **Sold by All Hardware Dealers**

NEW BRITAIN, CONN.

THE "DISSTON SAW" WILL DO MORE WORK WITH LESS EXERTION AND HOLD ITS CUTTING EDGE LONGER THAN ANY OTHER BRAND OF SAW.

Fully Warranted as to Material and Manufacture.

Henry Disston & Sons, Inc.,
Keystone Saw Tool Steel & File Works.
Philadelphia, Penna.

For Additional Information Send a Postal For Our Pamphlet "Practical Hints To Mechanics."

"ENTERPRISE"

Fruit, Wine *and* Jelly PRESS

Extracts *the* Juice *and* Ejects *the* Skins *and* Seeds in one operation

No. 34, $3.00

Meat Juice Extractor

No. 21, $2.50

Ice Shredders

		per doz.
No. 33.	Tinned	$6.00
No. 34.	Nickeled	15.00

Descriptive Catalogue mailed Free **Order through your Jobber**

The Enterprise Manufacturing Co. of Pa., Philadelphia, Pa., U. S. A.

R. B. WARD, Belleville, Kas., writes:

"Please take my advertisement, 'Tinner Wanted,' out of THE AMERICAN ARTISAN. Your paper certainly reaches the craft. I cannot find time to answer all the applications coming in."

"Well Bought is Half Sold."

No business proverb could be truer than this one. The hardware dealer comes out on top who gets up-to-date goods suitable to his locality at attractive prices. The Fall Season will soon be here and dealers should stock up. No western hardware *entrepot* can compare with ours. We have the goods—the latest and best. We are in a position to make better prices than our competitors. We can give the dealer unequaled shipping facilities on all orders. We number among our patrons today the leading and most prosperous hardware dealers in Nebraska, Iowa, Missouri, Kansas, Minnesota, The Dakotas, Colorado, Wyoming, Idaho and Montana. We could not hold this trade the way we do if we were not in a position to give them better service than our competitors. If you are not on our list for trade literature kindly send in your name.

Lee-Glass-Andreesen Hardware Co.,
OMAHA, NEB.

Peters Cartridges

Peters Cartridges

Peters Cartridges

LOADED WITH KING'S SEMI-SMOKELESS POWDER

Hold the World's Records. A FULL LINE OF THIS AMMUNITION FOR RIFLE, REVOLVER AND PISTOL.

AMMUNITION OF TO-DAY.

A FEW OF MANY RECENT VICTORIES

WON

- Indoor Rifle Championship for United States, 1898, 1899, 1900, 1901.
- Interstate Rifle Match, Sea Girt, N. J., 1900.
- Interstate Regimental Team Match, Sea Girt, N. J., 1900.
- Allcomers' Military Match, 1900.
- New Jersey Rifle Ass'n Trophy Match, 1900.
- Winchester Match, Sea Girt, N. J., 1900.
- Revolver Reentry Match and Revolver Team Match, Sea Girt, N. J., 1900.

Ammunition Loaded With **King's Semi-Smokeless Powder,**

MADE HIGHEST SCORES IN International Revolver Match, (America vs. France), 1900. Won the Wimbledon Cup Match (30 shots at 1000 yards), 1900. The Rifle Championship for Greater New York and vicinity (100 shots at 200 yards), 1899-1900.

The above wonderful records tell the whole story of unequaled accuracy, velocity, trajectory and uniformity. THESE CARTRIDGES NEVER DETERIORATE. They shoot with little noise and slight smoke, and can be used for a day at a time without the necessity of cleaning the gun. Peters Cartridges have been tested, and are now USED BY THE WORLD'S EXPERTS.

The Peters Cartridge Co.,
Government Square, Cincinnati, Ohio.

EASTERN BRANCH: { T. H. KELLER, Manager, 80 Chambers Street, NEW YORK.

Peters Cartridges

Peters Cartridges

Lackawanna Railroad

The Scenic Line TO New York City

Palatial Solid Vestibuled Trains
Superb Dining Cars
(Meals a la Carte)
Observation Cars **Latest Pullmans**
Elegant Day Coaches

3 THROUGH TRAINS DAILY from CHICAGO 3

Leaving Chicago	Arriving New York
10.35 a. m.	3.35 p. m. next day.
2.30 p. m.	7.30 p. m. next day.
10.30 p. m.	7.10 a. m. 2d day.

Rates $18.00 First Class, $16.00 Second Class

CITY TICKET OFFICE: 103 Adams Street
GEO. A. CULLEN, Gen'l West'n Pass. Agt.
CHICAGO

Brilliant Enameled Steel Ware

This ware is now manufactured by our factory at Bellaire in the Brown Color only, same having been discontinued in all colors by our Portland, Conn. factory. Particular effort is being made to turn out a highly satisfactory and pleasing article, and all dealers are requested to order a sample lot to be convinced of the merit of this ware.

White and White Enameled Steel Ware

This ware will also be made by our Bellaire Factory only hereafter having been discontinued by the Portland Factory. A large line of hospital goods made in this ware Recommended where sanitary qualities are essential.

National Enameling & Stamping Co.

BRANCH OFFICES New York Baltimore Chicago St. Louis Milwaukee ADDRESS OFFICE NEAREST YOUR LOCATION

Trade-Mark: ROGERS

It's the **initial "Trade Marks"** which distinguish our silverware from other Rogers goods, as we use our initials in monogram as our trade marks.

Trade-Mark: ROGERS BROS.

The Real Rogers Not in The Trust.

Trade-Mark: ROGERS BROS.

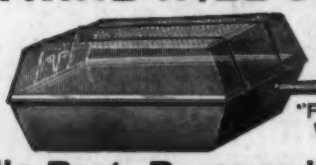
Silverware bearing these trade marks are guaranteed to strip as much silver as any Rogers brand on the market. New patterns of Superior Finish and Beautiful Designs.

The Simeon L. & George H. Rogers Co.

Factories: Hartford, Conn.; Wallingford, Conn. P. O. Box 1205, HARTFORD, CONN.

Trade-Mark: ROGERS

A TRIAL WILL CONVINCE YOU THAT



MORE'S REVERSIBLE CORN POPPER.

"POPS THE CORN WITH OR WITHOUT THE SEASONING"

Sells Best, Because it meets all Requirements.

Made double to answer the purpose of two poppers; one side is made of wire, to be used when the corn is preferred popped dry (as in the ordinary popper). **The other side is made of steel,** to be used when the corn is preferred popped in the seasoning (like Grandma popped in the kettle). If your jobber will not supply you with these and my other specialties, write the manufacturer,

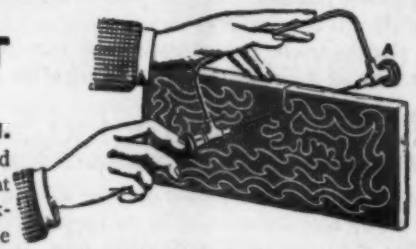
C. A. Chapman, 279 Exchange St., Geneva, N. Y.

Van Deusen Cake Molds and Egg Whip, "Crusty" Bread Pan.

ILLUSTRATION SHOWING

JONES' RATCHET COPING SAW

IN OPERATION.



The Jones Ratchet Frame is constructed with a steel back and Ratchet arrangement (see illustration) which enables the workman to quickly set the blade at any angle by the handle and button at the other end of saw frame (see letter A).

Jones & Dommersnas,

31 & 33 Indiana St., - - - - CHICAGO.

All Kinds of **TINWARE, Stamped Tin and Metal Goods**

are being sold by us at figures you cannot afford not to get. Our large seven-story factory, equipped with the latest improved machinery, enables us to undersell all competition.

American Tinware Mfg. Co.,

10 & 12 Fry St., CHICAGO.

Fox Brand Razors

are known as the best.

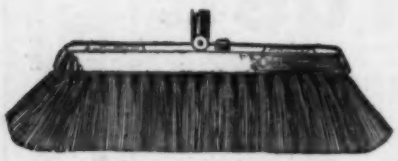
WE MAKE ALL WIDTHS AND STYLES. THE FOX TRADE MARK IS REGISTERED. SEND FOR CATALOGUE.

Fox Cutlery Co.,

928 MAIN ST., DUBUQUE, IA.

48 Center St., New York, N. Y., Canandaigua, N. Y.

"The World's Only" Sanitary Dustless Floor Brush.



Dust simply cannot rise when sweeping with "The World's Only"—Disease germs and insects cannot live—Floors improve—Carpets brighten. Write for our circular. Agents Wanted.

Milwaukee Dustless Brush Co., 122 Sycamore St., Milwaukee, Wis.

Greig Brothers, Mitchell, Iowa, write: — "Please discontinue ad for Tinner, we have had applications from Ohio to Northern Wis."

The No. 1 Fire Pot

$6.00 Net.

Is the patriarch of our line, and is known wherever gasoline is used. We are proud of him and his numerous family, and send any one of them out with the understanding that if your are not pleased your money will be refunded. We have a booklet giving the pedigree of No. 1 Fire pot and family. **It is Free** and will enable you to select a fire that will be just what you want. Jobbers will supply at factory price.

Clayton & Lambert Mfg. Co.,

DETROIT, MICH.

Just a Little Higher

in price, but so much

HIGHER IN QUALITY

that the great majority of dealers prefer to sell

Caldwell Sash Balances

They can recommend them with clear conscience. Write for catalog.

Caldwell Mfg. Co.

2 Jones St., Rochester, N. Y.

A Gas Stove Retailing for 25c.

With liberal discount to the trade.

Simple! Useful! Durable.

Always ready for heating water, milk, tea, curling irons, etc.

Can be transferred from one room to another.

Handsome and very profitable to the trade. Base and top grate cast-iron (coppered); body corrugated tin; wire gauze at top and an automatic mixer in base requiring no adjustment.

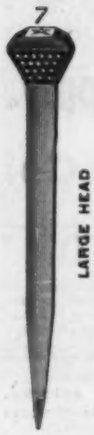
Place the stove over an ordinary gas burner and light on top of wire gauze.

Will not black or smoke.

Favorite Novelty Co.,

129 Beaubien St., Detroit, Mich.

Star Horse Nails



THE TOUGHEST AND BEST MADE

In Ordering STAR NAILS State Whether You Want Large or Small Heads, Explicitly in Your Order.

THESE NAILS ARE MADE OF THE BEST SWEDISH IRON.

MANUFACTURED BY

UNION HORSE NAIL CO.

585 to 603 Twenty-Second Street, - CHICAGO, ILLINOIS.

Standard Chain Company.
Chain of all Kinds.
Pittsburgh, Pa.

It is made of Steel.

White Tile Top.

Tin or Brass Scoop.

Brass Dial.

IMPROVED
YOUNG AMERICA SCALE.
BEST IN THE WORLD.

A most beautiful and attractive scale for all purposes. Beautifully enameled, ornamented and striped. Weighs 20 pounds by ounces. Occupies but little space. Is light and easily moved. It can be regulated by turning the brass screw on top. It is always ready and easily understood. It is a convenient scale to use and has no weights that may be lost. You can look this one in the face to prove its accuracy without looking for weights. Every scale examined before leaving the factory and warranted correct.

MANUFACTURED BY

AMERICAN CUTLERY CO., CHICAGO, ILL.

SPERRY'S CALDRONS....

Full measure, guaranteed perfect, original patterns, with metal distributed where it is needed. Many Caldrons are made from our castings as patterns. They are inferior to original, as they have light bottoms and heavy sides and hold less.

D. R. SPERRY & CO.,
HOLLOW-WARE FOUNDERS,
BATAVIA, ILL.

TWELVE SIZES ALWAYS IN STOCK.

TACKS

TOWER M'F'G. CO.
ELM & FRONT STS.
CINCINNATI, O
MANUFACTURERS

Our "Confidential" Catalogue No. 115

Intended **exclusively** for the Legitimate

Hardware Trade,

Contains a bargain list of merchandise bought by us at

Sheriffs', Receivers' and Manufacturers' Sales.

Write for it to-day.

Chicago House Wrecking Co.,
West 35th and Iron Sts., CHICAGO.

T. F. SCULLIN, MANUFACTURER.
INDIANAPOLIS, IND.
MFG'S PATENT ARTICLES,
HARDWARE SPECIALTIES & NOVELTIES OF ANY DESCRIPTION MADE TO ORDER.
PUNCHES & DIES.
CORRESPONDENCE SOLICITED.

Persistence in Advertising

In the expansion of business now bringing profit to so many manufacturers, advertisers who have made themselves regularly prominent in the past five years have been notable in reaping the rewards of persistent publicity

---

The wire netting being almost invisible flies do not see it and its strike makes no breeze to blow them away, so they are easily and quickly killed.

The "King" Fly Killer

Size 5x18 Inches.

Patented July 9, 1900.

Kills flies without crushing; can be killed on finest fabrics without soiling them.

R. R. Montgomery & Co., DECATUR, ILL., U. S. A.

A drawing card for any merchant, for when once used party will never be without one. Sent to any address by mail for 15c. postage. Sample to trade free.

If
You Want
The Latest Designs,
and
Best Fitting
METAL CEILINGS
On The Market,
We Make Them.
Also
Cornice, Skylights,
Eaves Trough, Conductor Pipe.
J. H. ELLER & CO.,
Canton, Ohio.

Hardware Dealers
Can Handle
Northrop's
Stamped
Steel Ceilings
and do well for their customers and themselves. Send for catalogue—give diagram and description of room for an estimate and we will no the rest.
H. S. Northrop, 53 Cherry St., NEW YORK.

Ornamental Pipe Straps.
The most perfectly cut and brightest tinned straps ever sold.
Malleable and Wrought Hooks.
Quality the best that can be made. Full line of valves and plungers. Ask for samples, catalog and prices.
BERGER BROS. CO., Mnfrs.,
231 and 237 Arch St., PHILADELPHIA.

"Sampson Brand" Pure Asphalt Roofing.
Never Dries Out or Cracks.
Planet Brand Tarred Ready Roofing, Slaters' Felt, Building Papers, Roofing Cements, Paints, Etc.
Write us for prices. J. L. Perkins & Co., 241 Lake St. CHICAGO.

"Eagle" Brand Copper Rivets and Burrs.
STANDARD FOR QUALITY. (Lake Superior Copper.)
—MANUFACTURED BY—
THE PLUME & ATWOOD MFG. CO.,
29 Murray St., NEW YORK. 196 Lake St., CHICAGO, ILL.

—OUR—
Steel Ceilings
ARE UP-TO-DATE AND
Easiest to Apply.
W. J. Burton & Co.
DETROIT, MICH.

VICTOR
For public buildings of every character where first-class roofing is a consideration, our galvanized
VICTOR SHINGLE
is unequalled.
Deeply embossed.
Presents attractive appearance.
Telescope Side Lock.
Catalogue fully describes them.
Montross Metal Shingle Co.,
CAMDEN, N. J.

The "Centennial" Rain-Water Cut-Off.

The strongest, most durable and cheapest CUT-OFF on the market.
The only single Cut-off made to fit CORRUGATED and Plain Pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.
Patent applied for. Manufactured only by
COONEY & GEIGER,
19 & 21 E. South St., INDIANAPOLIS, IND.

Bradner Smith & Co.
Paper Makers,
CHICAGO.
BUILDING,
WRAPPING,
WRITING,
NEWS,
BOOK
Paper
Send for Catalogue.

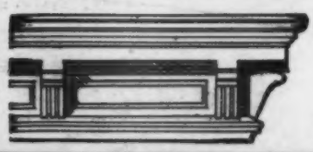
Enterprising Dealers should sell
STANDARD SELF MELTING WAX STRINGS FOR SEALING FRUIT CANS.
They are a great success and good sellers.
Economical and sure. For descriptive circular and quantity price address,
C. C. FOUTS,
MIDDLETOWN, OHIO.

SKYLIGHTS THAT DO NOT LEAK.

CONDENSATION FROM GLASS CARRIED AWAY AND DISCHARGED — NO SOAKING BETWEEN LAPS — BEST MATERIAL AND WORKMANSHIP GUARANTEED — ANY STYLE DESIRED — GALVANIZED OR COPPER FRAMES GLASS OF ANY KIND OR THICKNESS.

THE CANTON STEEL ROOFING COMPANY
CANTON, OHIO.

JAMES A. MILLER & BRO.
129 So. Clinton St.,
CHICAGO.
Correspondence Solicit'd.



Corrugated and other IRON ROOFINGS.
SKYLIGHTS,
CORNICES,
CONDUCTOR PIPES,
GUTTERS, ETC.

"Kuehn's"
Patented.
Rain Water Cut-off
is made very strong and has a lever that can not get out of order. It will fit corrugated pipe. There is a distinct saving of both labor and solder in applying it to the pipe.
La Crosse Steel Roofing & Corrugating Co.
LA CROSSE, WIS.

SLATE.
ALL GRADES MANUFACTURED AND SOLD BY
AULD & CONGER,
CLEVELAND.

S. C. SMITH, President — WM. BRAY, Treasurer — B. W. RIBBLE, Secretary
The East Bangor Consolidated Slate Co.
.... MANUFACTURERS OF ....
Laundry Tubs, Burial Cases, Urinal Stalls, Tiles, Genuine Bangor Roofing Slate and General Structural Slate.
EAST BANGOR, PENNSYLVANIA.

GARRY IRON & STEEL ROOFING COMPANY
CORRUGATED
ROOFING SIDING & CEILING
CLEVELAND OHIO.

GRAY'S ELBOW PATTERNS.
From 1" to 40" in diameter in two sets. Set (a). From 1" to 20" in 2-3 and 4 pieces, made on blue print paper, post paid on receipt of $1.00. Set (b). From 20" to 40" in 5-6-7 and 8 pieces on blue print paper, post paid on receipt of $1.50 or both sets, 144 patterns, for $2.00. Full instructions with each set.
C. L. GRAY,
140-148 Ferris St., Galesburg, Ill.

Cheapest
In the World.
Sizes 3/8 and 1/2 inch.
J. M. LITCHFIELD,
284 PEARL ST., NEW YORK.

Write us for Catalogue and Low Prices on BEST
Steel Roofing, Corrugated Iron, Etc.
We are large manufacturers of these goods and can save you money.
SYKES STEEL ROOFING CO. Chicago, Ill., and Niles, Ohio.

PERFORATED METAL
THE ROBERT AITCHISON PERFORATED METAL CO. 303-305 DEARBORN STREET CHICAGO ILL.

*If
You want practical up-to-date ideas about steam heating, furnace heating and hot water heating, You should get the House Warming Manual.
If
You want the practical experience of many experts rather than the heating theories of one man, You should get the House Warming Manual.
If
You desire estimates and plans of heating work that will save you many dollars in your work, You should get the House Warming Manual.
Price, $3.50. For sale by all booksellers, or by
DANIEL STERN, 69 Dearborn St., Chicago.

$25 ON 5 TON IS WHAT YOU CAN SAVE

We make all kinds of scales.
Write for prices
ALSO B. B. PUMPS AND WINDMILLS.
BECKMAN BROS., Des Moines, Iowa.

Making Old Rooms Look Like New.

If that old room of yours could talk, it would say, "Finish me with one of Berger's 'Classik' Metal Ceilings."

If you don't happen to have such a room, get some one who does have one to refinish it with this artistic and lasting material.

You can make a nice thing out of it by furnishing the material and also handling the work of putting it on.

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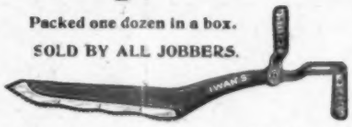

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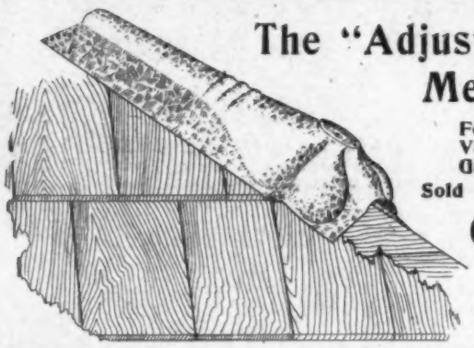

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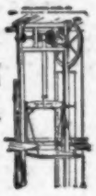

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